

EXHIBIT #2
DATE Jan 18th
FILE None

Office of Research & Policy Analysis

**A LEGISLATOR'S GUIDE TO MONTANA'S
PUBLIC RETIREMENT SYSTEMS
2008**

Prepared by
Dave Bohyer, Research Director, LSD
for the
State Administration and Veterans' Affairs Interim Committee

December 2008

Published By
Montana Legislative Services Division
P.O. Box 201706
Helena, MT 59620-1706
<http://leg.mt.gov>
(406) 444-3064 FAX: (406) 444-3036



**Legislative
Services
Division**

TABLE OF CONTENTS

| | Page |
|--|---------------|
| Chapter 1: Overview and Perspective | 1 |
| General | 1 |
| Membership | 1 |
| Assets and Liabilities | 2 |
| Recent History of Legislative Oversight Activities | 2 |
| About This Guide | 5 |
| Chapter 2: Primer on Retirement Plans | 7 |
| Purpose of Retirement Plans | 7 |
| Responsibility | 7 |
| Retirement Plan Categories | 8 |
| Defined Benefit Plans | 8 |
| Defined Contribution Plans | 9 |
| Public Versus Private Plans | 10 |
| Comparison of DB to DC Plans | 11 |
| Hybrid Plans | 13 |
| Pension Regulation and Tax Treatment | 14 |
| Specific Plans Compared | 14 |
| Summary | 17 |
| Chapter 3: Overview of Montana's Public Employee Retirement Systems | 19 |
| Governance and Administration | 20 |
| Public Employees' Retirement Board (PERB) | 20 |
| Teachers' Retirement Board (TRB) | 20 |
| Board of Regents | 21 |
| The Legislature | 21 |
| Local Government Participation | 21 |
| Chapter 4: Comparing The Plans | 23 |
| Benefit Formula Multipliers | 23 |
| PERS benefit multipliers | 23 |

| | |
|---|--------|
| TRS benefit multiplier | 23 |
| Public safety plans' benefit multipliers | 24 |
| Final Average Compensation | 24 |
| Years of Service and Retirement Age | 25 |
| Vesting | 26 |
| Early Retirement | 27 |
| Postretirement Benefit Increases | 27 |
| Plan-to-Plan Comparisons | 28 |
| Chapter 5: Assessing Financial Health | 39 |
| Actuarial Valuations | 40 |
| Actuarial soundness | 42 |
| Actuarial gains and losses | 42 |
| Indicators of Financial Strength | 43 |
| Investment Assumptions and Performance | 44 |
| Investment return assumptions | 44 |
| Investment performance | 44 |
| Investment allocation | 45 |
| Investment categories | 45 |
| Implications of Investment Returns and Assumptions | 47 |
| Realized gains versus market gain | 48 |
| Investments and DC Plans | 50 |
| The ORP and PERS/DC | 50 |
| Asset allocation | 51 |
| Education and risk | 53 |
| Portability | 53 |
| Legislative Sessions and Fiscal Notes | 53 |
| Summary | 55 |
| Chapter 6: Public Employee Retirement Issues and the Debate Over | |
| Converting | 57 |
| Defined Benefit Plan Issues | 57 |
| Creating past-service liability | 57 |
| The ratchet effect | 58 |
| Benefits can be exchanged for other benefits of equal or greater value | 58 |

| | |
|---|-----------|
| The leapfrog effect | 58 |
| Funding benefit enhancements | 59 |
| Converting from a DB to a DC Plan | 60 |
| An impetus for change | 60 |
| House Bill No. 79 | 60 |
| PERS/DC opens for business | 61 |
| As others see it | 61 |
| Other States | 63 |
| Summary | 63 |
| Chapter 7: Policy Principles | 65 |
| Need for Policy Principles | 65 |
| Retirement Principles Advocated by the National Conference of State Legislatures | 65 |
| Adequacy of benefits | 66 |
| Contemporary funding of benefits | 68 |
| The Prudent Expert Rule | 68 |
| Equitable allocation of benefits | 68 |
| Summary | 69 |
| Appendix A | 71 |
| Principles | 71 |
| Guidelines | 71 |
| Glossary | 75 |
| List of Retirement-Related Acronyms | 85 |
| Figures and Tables | |
| Figure 1: Comparison: DB vs. DC Retirement Plans | 12 |
| Figure 2: Comparison of Plans by Type | 15 |
| Table 1: Benefit Eligibility and Basic Benefit Formula | 29 |
| Table 2: Disability Benefits | 30 |
| Table 3: Retiree and Benefit Recipient Data | 31 |

| | |
|--|----|
| Table 4: Active Membership Data | 32 |
| Table 5: Contributions, Costs, and Actuarial Data | 33 |
| Table 6: Investment Data | 35 |
| Table 7: Volunteer Firefighters' Compensation Act | 37 |
| Table 8: PERS Defined Contribution Retirement Plan | 38 |

CHAPTER 1

OVERVIEW AND PERSPECTIVE

General

Montana's public employee retirement systems include: nine statewide public retirement plans governed by the Public Employees' Retirement Board (PERB) and administered by the Montana Public Employees' Retirement Administration (MPERA); the Teachers' Retirement System (TRS) governed by the Teachers' Retirement Board (TRB) and administered by the Board's staff; the Montana University System's Optional Retirement Program (ORP) governed by the Board of Regents and administered through the Commissioner of Higher Education; and locally governed and administered police and firefighters' pension trust funds.

Except for the ORP and the defined contribution (DC) plan within the Public Employees' Retirement System (PERS) available as an option to certain employees who are eligible to be members of the PERS, each of Montana's retirement plans is a defined benefit (DB) plan. The PERS/DB plan is the largest of Montana's nine statewide systems under the PERB and, technically, is a hybrid plan with a money purchase (defined contribution) feature. The ORP is a pure defined contribution plan, as is the PERS/DC plan option. These plan types and specific information on each of Montana's public retirement plans are discussed in this guide.

Membership

A public employee becomes a member of one of the retirement plans on the day the employee is hired. Except for the volunteer firefighters' retirement plan, which is funded entirely from the state general fund, both employees and employers contribute to the plans (i.e., they are "cost-sharing" plans). Employee contributions are tax-deferred and, along with employer contributions, are automatically made each pay period. Contribution amounts are set in statute by the Legislature. In the defined benefit retirement plans, when an employee leaves public service, the employee has the option of leaving contributions on account in the retirement plan or withdrawing employee contributions plus interest. Once vested (i.e., a contributing member for 5 years), an employee is entitled to receive plan benefits whether or not the employee stays in public service long enough to receive a full

(normal) retirement benefit. As is typical of most large defined benefit plans, Montana's public employee defined benefit plans also provide survivor and disability benefits.

Assets and Liabilities

The retirement funds of the defined benefit plans are constitutionally protected trust funds.¹ Each plan's governing board members act as the plan's responsible fiduciaries. Each defined benefit plan's assets are managed and invested by the Montana Board of Investments (BOI).

The Montana University System (MUS) contracts with an investment management company to manage ORP participant assets. Similarly, the MPERA contracts with an investment management company to manage the accounts of each PERS/DC participants. Each ORP and PERS/DC plan participant makes his or her own investment choices from a selected menu of options.

The Legislature is the public body ultimately responsible for ensuring that each of Montana's public retirement systems remains soundly funded and equitably administered.

Recent History of Legislative Oversight Activities

During the 1991 Legislative Session, the Legislature passed a study resolution to establish a Joint Interim Subcommittee on Public Employee Retirement Systems to study the retirement systems and make public policy recommendations. The Subcommittee concluded that the complexity of issues, several different public plans, and an average of 40 to 50 retirement bills each legislative session made it difficult for the Legislature to enact consistent and equitable retirement policy. To help remedy this, the Subcommittee recommended a permanent oversight committee to review retirement legislation prior to each legislative session, to establish guiding principles for enacting sound retirement policy, and to publish a legislator's guide on Montana's public retirement systems.

¹ Art. VIII, sec. 15, Montana Constitution.

Responding to the Subcommittee's recommendation for an oversight committee, the 53rd Legislature (1993) enacted a statutory, but temporary, Committee on Public Employee Retirement Systems (CPERS).

The CPERS adopted guiding principles and screened and reported on several retirement proposals prior to the 1995 Legislative Session. Perhaps as a result of the success of CPERS, the 54th Legislature (1995) decided to renew CPERS and extended the Committee's termination date to June 30, 1997.

The 1995-1996 CPERS revised and adopted guiding principles, reviewed and reported on nearly 20 retirement proposals, and initiated an examination of whether Montana's PERS should be modified or converted from a hybrid defined benefit plan to a defined contribution plan.

The 55th Legislature (1997) approved two CPERS-requested bills, House Bill No. 90 and House Bill No. 91. House Bill No. 90 directed that a legislative committee design a new or modified PERS in order to provide for more plan flexibility, portability, and employee responsibility. The Committee was to also develop an implementation schedule for the recommended changes.

House Bill No. 91 renewed CPERS by again extending the Committee's termination date, this time through June 30, 1999. HB 91 allowed for CPERS to be the committee designated to undertake the HB 90 work to design a new or modified PERS.

The 56th Legislature (1999) enacted legislation to restructure interim committees by creating eight statutory interim committees with on-going monitoring functions related to specified state agencies and subject areas. The State Administration, Public Retirement Systems, and Veterans' Affairs Interim Committee (SAIC) succeeded CPERS as the legislative committee responsible for monitoring retirement issues.

In the early years of this decade, the SAIC continued to perform the following, but no longer statutory, duties and responsibilities:

- consider the financial soundness of the state's public employee retirement systems, based on reports from the teachers' retirement

board and the public employees' retirement board, and study and evaluate the equity and benefit structure of the state's public employee retirement systems;

- establish principles of sound fiscal and public policy as guidelines;
- as necessary, develop legislation to keep the retirement systems consistent with sound policy principles;
- solicit and review proposed statutory changes to any of the state's public employee retirement systems;
- report to the Legislature on each legislative proposal reviewed by the committee. The report must include but is not limited to:
 - ▶ a summary of the fiscal implications of the proposal;
 - ▶ an analysis of the effect that the proposal may have on other public employee retirement systems;
 - ▶ an analysis of the soundness of the proposal as a matter of public policy;
 - ▶ any amendments proposed by the committee; and
 - ▶ the committee's recommendation on whether the proposal should be enacted by the Legislature.
- attach the committee's report to any proposal that the committee considered and that is or has been introduced as a bill during a legislative session; and
- publish, for legislators' use, an information book on the state's public employee retirement systems.

The committee was also authorized to specify the date by which proposals affecting a retirement system must be submitted to the committee.

For various reasons, the SAIC reconstituted its acronym following the 2003 legislative session as the SAVA, short for State Administration and Veterans' Affairs (interim committee). Then, during the December 2005 Special Session, the statutory duties of the SAVA were expanded by recodifying the review and recommendation provisions that had been given to the CPERS and voluntarily adhered to by the SAIC and SAVA during the 1999-00, 2001-02, and 2003-04 interims.

About This Guide

This guide is designed to inform legislators about Montana's public retirement systems and relevant policy issues. The information presented is intended to provide background, reference material, and context whenever legislators examine more detailed information available from the boards that administer the plans or whenever legislators engage in discussions on retirement issues. This guide presents background on retirement plans in general, summarizes each of Montana's public retirement plans, and addresses funding and policy issues.

This guide does not provide an exhaustive discussion of different retirement plan types or sub-types or of theories related to retirement systems in general or public retirement plans in particular. It also does not provide examples of different scenarios that an individual member of a particular Montana system might encounter. For more information on these matters, contact the staff of the MPERA or TRS or legislative staff.

Finally, such matters as the propriety and adequacy of retirement benefits are not addressed.

CHAPTER 2

PRIMER ON RETIREMENT PLANS

Purpose of Retirement Plans

Planning for retirement is only part, though an essential part, of a person's total financial planning strategy. In theory, retirement plans exist solely to provide income in retirement, not to provide a tax-sheltered savings account. A retirement plan is a vehicle designed to ensure that a person will have an on-going source of income when the person is no longer working. Consequently, retirement plans require that a person meet certain membership and retirement eligibility criteria.²

Experts agree that to live comfortably in retirement, today's retiree needs a monthly income of 70% to 80% of the salary earned during the retiree's final years of work.^{3,4} Clearly, serious long-term planning is required to replace 80% of pre-retirement income for the duration of retirement. More than one plan or vehicle is necessary. Many types of retirement plans and a variety of insurance and investment products make retirement planning a complex affair. Social security, employer sponsored retirement plans, deferred compensation plans, and personal investments are all part of the equation in achieving a secure and adequate retirement income.

Responsibility

Pension plans were originally a financially expedient way to compensate employees for services rendered. Later, this rationale evolved into a view that employers were socially responsible for providing employee pensions. As pension plans evolved, so did government regulation to ensure that pension plans remained financially sound, that contracts were honored, and that people were not discriminated against. Finally, as employers and the government provided new and better incentives to employees to defer

² Bleakney, Thomas P., F.S.A., *Retirement Systems for Public Employees*, Pension Resource Council, University of Pennsylvania Press, 1991 edition, p. 10 and p. 33. National Conference of State Legislatures, *Public Pensions: A Legislator's Guide*, NCSL, Washington D.C., July 1995, pp. 1-3.

³ "How much money will I need in retirement?", in "The Ultimate Guide to Retirement" from *Money* magazine at <http://money.cnn.com>

⁴ "How much do you need to retire?", from *msn.money*. Originally printed in *Kiplinger's Personal Finance Magazine*.

compensation and employers began to require employee contributions to the employer-sponsored plans, employees became more and more responsible for their own retirement planning.

As a practical matter, providing for retirement income is a shared concern of employers, employees, and the government. Traditionally, government has discharged its responsibility through regulation and enactment of Social Security and public assistance programs. In contrast, employers use retirement plans to provide work incentives and further the company's financial interests. Therefore, there are unique public policy questions involved when the government is also the employer.⁵

Retirement plans oriented on individual needs and responsibilities are a relatively recent development.⁶ New public policy questions are being debated as the role of governments, employers, and individuals are being reviewed, especially in the public sector.

Retirement Plan Categories

There are basically two categories of retirement plans, defined benefit (DB) plans and defined contribution (DC) plans. Even at that, however, there are also hybrid plans that contain elements of both DB and DC plans. Each category reflects a distinctly different retirement philosophy.

Defined Benefit Plans: Defined benefit plans promise a member a specified, formula-driven monthly benefit when the member retires. Benefits within a DB plan often cover not only retirement but disability and survivor benefits as well. There are several types of DB plans, including:

- flat-benefit plans: providing a fixed dollar-amount per year of service;
 - pay-related plans: providing a benefit as a certain percentage of an employee's pay; and

⁵ Bleakney, Thomas P., F.S.A., *Retirement Systems for Public Employees*, p. 10.

⁶ Salisbury, Dallas L. "The Costs and Benefits of Pension Tax Expenditures," in *Pension Funding & Taxation: Implications for Tomorrow*, Employee Benefit Research Institute, 1994, pp. 85-86; see also Allen, Everett T., *Pension Planning: Pensions, Profit Sharing, and Other Deferred Compensation Plans*, Seventh Edition (Irwin: Boston, Mass.) 1992, pp. 16-17.

- ▶ hybrid plans: combining characteristics of both DB and DC plans.

To pay for defined benefits, contributions are deposited into a pension trust fund. These contributions are invested to increase plan assets. Building over time, the plan assets must ultimately be sufficient to pay for the defined benefits when those benefits come due. The required contribution amount is determined by an actuarial analysis using mathematical projections and incorporating a variety of economic and demographic assumptions. Different actuarial methods may be used in conducting an actuarial analysis, i.e., a plan valuation. These actuarial valuations determine, among other things, the present value of system assets and projected future costs. Actuarial valuations are conducted regularly to determine a plan's financial status and to adjust assumptions based on actual experience. (See Chapter 5 for a more thorough discussion on actuarial valuations.) Thus, in DB plans:

1. benefits are predictable, but costs are not;
2. contributions are pooled and managed so that assets are buffered from but not immune to market fluctuations;
3. the employer has a contractual obligation to provide promised benefits; and
4. unfunded liabilities—actuarially accrued liabilities that are not covered by actuarial assets—are typical.

Defined Contribution Plans: Defined contribution plans define the amount of money to be contributed but do not promise the benefit amount to be paid. Individual participants, rather than the employer, direct contributions to various investment options.⁷ Upon retirement, the value of each participant's account depends on total contributions plus investment earnings (or losses). When the participant retires, the balance of his or her account may be reinvested or converted to a monthly annuity. The amount of the annuity cannot be defined before the person retires because the account balance depends entirely on total contributions, investment performance, and the state of "the market" when the employee retires and reinvests or converts, e.g., to an annuity. Investment risk and expenses are, therefore, born entirely

⁷ Defined contribution plans have a "default" investment that is used whenever an employee fails to direct the investment of the contributions made to his or her account. The investment options are limited to a menu of options composed most often of stock mutual funds, bond mutual funds, and money market funds.

by the employee. A DC plan has no unfunded liabilities and does not rely on actuarial projections about the future. Thus, in DC plans:

1. costs are known, but benefits are not;
2. the account balance at retirement is subject to short-term market fluctuations; and
3. the employer is not contractually obligated to provide a certain benefit, but only the stated contributions.

There are several types of DC plans, including the following:

- money purchase plans: employer contributions are stated as a percentage of an employee's salary;
- target benefit plans: contributions are scaled to achieve a specified retirement benefit, but as a projection only;
- profit-sharing plans: employer-sponsored plans (including 401(k) plans, which do not have to be based on company profits);
- stock bonus plans: give employees stock options, typically at a discounted price; and
- employee stock ownership plans (ESOP): give employees ownership interest in the company.

Public Versus Private Plans

Defined benefit plans are the dominant plan type among public employers while DC plans are favored among private sector employers.⁸ However, trend data shows that DC plans have made some gains among public employers. In 1987, the federal government established a thrift savings plan, which is an optional tax-deferred plan similar to a 401(k), as a supplemental plan to its primary Civil Service and Federal Employee Retirement Systems, both DB systems. Additionally, the number of state and local government employees participating in a supplemental DC plan increased from 5% in 1987 to 9% by 1990. Nevertheless, nearly all state and local governments continue to sponsor primary DB plans.⁹ (As will be discussed in Chapter 6, some state

⁸ At least among the private employers who provide any retirement plan to their employees, DC plans are favored over DB plans.

⁹ Employee Benefit Research Institute (EBRI), *Pension Funding & Taxation*, "Public and Private Pension Today: An Overview of the System", by Celia Siverman and Paul Yakoboski, Washington D.C., 1994, pp. 18-21. More recent data was not available.

governments have expressed interest in moving their primary DB plans to DC plans.)

Increasingly common in the private sector, the typical employee of a medium or large private employer participates in a DB plan and/or a DC plan. In 1993-1994, 90% of full-time state and local government employees were covered by a primary DB retirement plan compared to 56% of private-sector employees. Of the private-sector employees covered by primary DB plans, 45% were also covered by a DC plan.¹⁰

Looking at trends in the private sector, between 1985 and 1989, the number of DC plans increased by about 67%. However, the majority of this increase occurred among smaller employers, with the number of new DC plans generally decreasing as plan size increased. The net increase in primary DC plans with 1,000 or more active participants amounted to 0.2% of the total 67% increase. The number of primary DB plans among large employers in the private sector has remained relatively stable.¹¹

Comparison of DB to DC Plans

Any underlying preference between DB and DC plans is philosophical. In DB plans, employers bear the primary responsibility and risk. In DC plans, employees bear the responsibility and risk. Whether a DB plan or a DC plan will provide public employees with a "better" benefit depends on many factors, primarily who should bear the responsibility and risk. Figure 1 provides a thumb-nail comparison of DB and DC retirement plans.

¹⁰ Foster, Ann, Ph.D., "Comparing Public and Private Pensions", U.S. Department of Labor, Bureau of Labor Statistics, January 1996.

¹¹ *Op. cit.*, p. 18.

Figure 1 provides a thumb-nail comparison of DB and DC retirement plans.

FIGURE 1
COMPARISON: DB vs. DC RETIREMENT PLANS

| Issue | DB Plans | DC Plans |
|-------------------------------------|---|---|
| Philosophical perspective | Employer responsibility. Employer is obligated to provide a base retirement benefit. Contributions are pooled and debts or gains, usually caused by market fluctuations, are shared by employers in the pool. Unfunded liabilities are typical. Reasonable amortization schedule provides financial security and "shock absorber". | Employee responsibility. Employer responsibility ends with contribution to the plan. Employee bears investment risks and responsibilities. No gains or losses to a shared plan so no amortization schedule and no actuarial valuations. |
| Flexibility | Less. A DB plan usually provides only the option of how the defined benefit is to be paid out, e.g., as a single life annuity, joint and survivor annuity, term certain, etc. | More. Depending on design, the plan may allow participants to choose contribution amount, investment options, and form of payout. |
| Portability | Less. Employer contributions are not made to individual accounts so if an employee leaves employment before vesting, the employee is usually not eligible for a retirement benefit or to "take" or "transfer" employer contributions. | More. Employer contributions are made to individual accounts. Money in the account may not be accessible until retirement, but the employee can continue to manage the account. Actual portability depends on the specific provisions of the plan, which may or may not limit transferability. |
| Investment risk & return | Risk is assumed by the employer. To the extent that assumptions or projections differ from actual experience, the pension funds may experience gains or losses. Pension assets are pooled. Gains and losses are smoothed over a long-term period. Risk is therefore minimized. | Risk is assumed by the employee. Employees may select a risk/return tradeoff to fit personal circumstances. |

| Issue | DB Plans | DC Plans |
|----------------------|---|---|
| Who benefits | Career employee. Typically, longer-term or older employees benefit most. | Short-term employee. Typically, shorter-term and younger employees benefit most (depending on investment choices and realization of assumptions.) |
| Unfunded liabilities | Typical. Current guidelines say that amortization in 30 years or less is an acceptable amortization schedule. | None. |
| Pension security | Higher. The benefit amount is guaranteed and can be counted on. Pension funds are buffered against large market losses. | Lower. The actual benefit amount is not known in advance. More susceptible to market fluctuations. |
| Administrative costs | Paid by plan sponsors. | Paid by plan participants. |

Hybrid Plans

As previously mentioned, there are different types of DB and DC plans. Additionally, there are hybrid plans where the line between a DB and DC plan has been blurred by the inclusion of both DB and DC features. For example, in PERS, a member's benefit is calculated under both a DB formula and a DC (money purchase) formula and the member is paid the higher of the two. Career employees or older employees (45 years old or older) typically do better under the DB formula, while shorter-term employees do better under the DC formula. (See Chapter 6 for a discussion of issues related to modifying PERS to further enhance the DC aspects of the PERS retirement plan.)

Pension Regulation and Tax Treatment

Sections 400 through 419 of Title 26, U.S.C.—Title 26 is the Internal Revenue Code (IRC)—and attendant federal administrative regulations govern public and private pension plans. Plans may be referred to according to the IRC section under which the plan is qualified (e.g., a 401(k) plan, a 403(b) plan, a 457 plan, etc.). Qualified pension plans are plans that comply with the IRC and applicable provisions of the Employee Retirement Income Security Act of 1974 (ERISA). The ERISA specifies nondiscrimination standards and regulates reporting and accounting procedures, etc. Qualified plans receive favorable tax treatment; nonqualified plans do not. Except for certain administrative and accounting standards, ERISA does not apply to public pension plans. However, public plans must be qualified under various sections of the IRC in order for employee contributions and accruing benefits to be tax-deferred.

Specific Plans Compared

Figure 2 summarizes some of the more common private and public retirement and deferred compensation plans.

FIGURE 2: Comparison of Plans by Type

| PLAN TYPE | OBJECTIVE | WHO MAY PARTICIPATE | CONTRIBUTION LIMITS ¹² | SPECIAL CONSTRAINTS |
|---|--|---|---|--|
| Private employer plans | | | | |
| Cash or Deferred Profit Sharing Plan - 401(k) | Allow private-sector employees to defer salary to avoid current taxation and delay taxation of earnings. | Private-sector only. Employer-sponsored. Employer and employee contributions allowed. | Maximum employee contributions are the lesser of 100% of salary or \$15,500 annually. Employer contributions may not exceed 6% of employee's pretax income. | Service requirements may be imposed for eligibility and vesting up to 7 years. Employer generally needs at least 10 employees for program to succeed. (State or local government may not adopt this type of plan unless set up prior to 1986.) |
| Keogh | Retirement savings incentive for self-employed and noncorporate employers. | Self-employed. Noncorporate companies and their employees. | Maximum employee contributions are the lesser of 100% of salary or \$15,500 annually. Maximum employer contributions are the lesser of 25 % of salary or \$46,000 annually. Total contributions cannot exceed \$46,000. | Similar to Profit Sharing and Money Purchase plans. |
| SEP (Simplified Employee Pensions)-IRA | Give small employers opportunity to shelter income from taxation and provide employer and employee with retirement income. | Employer-sponsored. For small private-sector employers and their employees. | Maximum employer contributions are the lesser of 25 % of salary or \$46,000 annually. | Each employee must set up an IRA to which the employer may then contribute. Amounts contributed to another qualified plan count toward limits. |

¹² Contribution limits depend on the employee's age and income level, among other factors. There are frequently "catch up" provisions allowing for additional employee contributions.

| Profit Sharing Plan | Provide a means for employees to share in employer profits, gain supplemental retirement income. | Employer-sponsored, but does not have to be tied to employer profits. | Maximum employer contributions are the lesser of 25 % of salary or \$46,000 annually. | Service requirements may be imposed for eligibility and vesting up to 7 years. |
|---|---|--|---|--|
| PLAN TYPE | OBJECTIVE | WHO MAY PARTICIPATE | CONTRIBUTION LIMITS | SPECIAL CONSTRAINTS |
| Individual plans | | | | |
| Individual Retirement Account (IRA) | Shelter income from taxation, accumulate for retirement, defer taxation until distribution. | Any individual with earned income. | Individual may contribute up to \$5,000 annually. | Deductibility is limited under certain conditions. |
| Public nonprofit plans | | | | |
| 403(b) Plan | Provide tax-deferred annuities for nonprofit organizations and schools. | Employer-sponsored for employees. Both employers and employees may contribute. | Maximum employee contributions are the lesser of 100% of salary or \$15,500 annually. Maximum employer contributions are the lesser of 25 % of salary or \$46,000 annually. Total contributions cannot exceed \$46,000. | Additional elective contributions subject to special non-discrimination rules. |
| 457 Plan (Not regulated under IRC as a pension plan, but is subject to some nondiscrimination regulations. | Allow for tax-deferred compensation for public employees similar to the 401 (k) plan in private sector. | Only for employees of state and local governments. | Maximum employee contributions are the lesser of 100% of salary or \$15,500 annually. | Amounts deferred under a 457 plan are separate from contributions to other retirement savings plans. |

Summary

The Montana University System's (MUS) Optional Retirement Program (ORP) and the PERS/DC plan are primary 401(a) plans and both are DC plans. The MUS/ORP membership is composed of certain faculty and administrators of higher education institutions. The PERS/DC plan is composed of general public employees who voluntarily elect to participate in the PERS/DC plan. Montana's other public retirement plans are employer-sponsored DB plans and are the primary retirement plans for the vast majority of Montana's public employees.

Like many employees in medium and large private companies, Montana's public employees may also voluntarily participate in DC plans to supplement their retirement savings. Montana law allows state and local employees to join a 457 deferred compensation plan, if the employer has provided for the plan.¹³ School districts and universities may establish 403(b) plans for their employees, and many Montana school districts and the MUS have done so. If the person belongs to a 457 plan and to a 403(b) plan he or she may contribute the maximum to both plans, a change made to the IRC in 2002.

An individual public employee may also establish a traditional IRA or Roth IRA.¹⁴ Contributions to a traditional IRA are tax deductible if the employee's income does not exceed a certain threshold established in the IRC (\$46,000 for 2008). Therefore, a Roth IRA may be more attractive to some public employees.

Social Security also provides most of Montana's public employees with a certain amount of retirement income.¹⁵ In Montana, as in many states and localities, public safety employees typically do not participate in Social Security.

In the final analysis, to achieve the recommended 70% to 80% income replacement in retirement, Montana's public employees rely heavily on their

¹³ See Title 10, ch. 50, MCA.

¹⁴ Contributions to a Roth IRA are "after tax" whereas contributions to a traditional IRA are "before tax". Distributions from a Roth IRA are not taxable if the account holder meets certain conditions.

¹⁵ Members of the statewide retirement plans for Police, Firefighters, and Highway Patrol Officers are not covered by Social Security.

primary employer-sponsored retirement plans and may participate in secondary DC plans to supplement their retirement savings. The next chapter discusses in greater detail each of Montana's primary DB retirement plans, the University System's DC retirement plan (the ORP), and the PERS/DC plan.

CHAPTER 3

OVERVIEW OF MONTANA'S PUBLIC EMPLOYEE RETIREMENT SYSTEMS

Montana law (Title 19, MCA) provides for the following public employee retirement systems:

- a Public Employees' Retirement System (PERS). The PERS is composed of two "plans". The system is composed of a hybrid DB/money purchase (DC) plan that is commonly called the PERS/DB plan or simply the DB plan. The PERS/DB plan covers most of the general classified positions in state and participating local governments. The PERS also includes a pure DC plan, commonly referred to as the PERS/DC plan or simply the DC plan. The PERS/DC plan was implemented on July 1, 2002, and immediately became an option in which newly-hired PERS-eligible employees could become members. The PERS/DC plan also became an option to which then-current PERS/DB nonretiree-members could transfer through a one-time-only, irrevocable election.
- a Teachers' Retirement System (TRS). The TRS is a DB plan covering teachers and certain administrators and administrative staff employed by the state, school districts, and the Montana University System.
- a Sheriffs' Retirement System (SRS). The SRS is a DB plan covering sheriffs, sheriffs' deputies, and select others employed by each county in the county sheriff's office and certain investigators employed by the Montana Department of Justice.
- a Municipal Police Officers' Retirement System (MPORS). The MPORS is a DB plan covering police officers employed by participating cities, towns, and municipalities.
- a Firefighters' Unified Retirement System (FURS). The FURS is a DB plan covering paid firefighters employed by participating cities, towns, and municipalities.
- a Highway Patrol Officers' Retirement System (HPORS). The HPORS is a DB plan covering highway patrol officers employed by the state.
- a Game Wardens' and Peace Officers' Retirement System (GWPORS). The GWPORS is a DB plan that originally covered only Game Wardens employed by the state, but expanded in July 1, 1999, to include specified state law enforcement positions, including campus security officers.

- a Judges' Retirement System (JRS). The JRS is a DB plan covering District Court Judges, the Supreme Court Justices, and one Chief Water Judge employed by the state Judicial Branch.
- a Volunteer Firefighters' Compensation Act (VFCA) pension trust fund. The VFCA is a DB plan covering the volunteer (uncompensated) firefighters of qualifying volunteer fire companies organized in unincorporated areas.
- an Optional Retirement Program (ORP). The ORP is a 401(a) DC plan covering the faculty and administrators of the Montana University System.

Governance and Administration

Public Employees' Retirement Board: The Public Employees' Retirement Board (PERB) governs nine of the 11 statewide retirement plans: PERS/DB, PERS/DC, SRS, MPORS, FURS, HPORS, GWRS, JRS, and the VFCA.

The PERB consists of seven members appointed by the Governor as specified in section 2-15-1009, Montana Code Annotated (MCA). The Board is composed of three active members of a public employee retirement system, a retired member of one of the plans, two members selected at large, and one member who has experience in investment management or counseling or financial planning or who has other similar experience. Of the three active members of a public employee retirement system, one must be a member of the PERS/DC plan. Each PERB member serves 5 years. The Board hires its own staff, including an Executive Director. The Montana Public Employees' Retirement Administration (MPERA) is the operational agency directed by the Board.

The PERB members are fiduciaries of the Board-governed retirement systems. They are constitutionally responsible for ensuring that the systems are operated in an actuarially sound manner and for conducting actuarial valuations of each plan.¹⁶

Teachers' Retirement Board: The Teachers' Retirement Board (TRB) administers the Teachers' Retirement System (TRS). Pursuant to section 2-15-1010, MCA, the TRB consists of six members appointed by the Governor

¹⁶ Art. VIII, Sec. 15, Mont. Const.

and must include three members from the teaching profession (one must be an active classroom teacher), two members who represent the public, and one member who retired from TRS.¹⁷

The TRB also hires its own staff, including an Executive Director, and TRB members are fiduciaries for the TRS.

Board of Regents: The Board of Regents contracts with an investment company (currently TIAA-CREF) for the administration of the Montana University System's Optional Retirement Program (ORP). The Board's ORP-related duties and responsibilities are defined in section 19-21-103, MCA. The ORP is not a mandated program. Section 19-21-101, MCA, merely authorizes the Board of Regents to establish an ORP for certain faculty and administrative staff members. The Regents established the ORP in 1987 as a truly "optional" program. Within 6 years of implementation, however, the ORP was legislatively declared to be the only retirement plan in which newly hired MUS faculty and administrators could become members.¹⁸

The Legislature: The Legislature remains the final authority for determining retirement policy and for setting contribution rates in all of the retirement systems. Chapter 4 discusses the components of the state's DB retirement systems and plans and provides an assessment of each the systems in context with national trends and compared with Montana's other public retirement systems—which is good information for all legislators to keep in mind as they consider revisions to public employee retirement systems.

Local Government Participation

Most of Montana's public employee retirement systems can be traced back to their genesis as creations of local governments. Montana's first foray into a retirement system for public employees occurred only 10 years after Montana achieved statehood. In 1899, the Sixth Legislature authorized each municipality to establish a fire department. Each municipality that established a fire department was required to establish a "disability fund", to be used to

¹⁷ Section 2-15-1010, MCA, as amended. The 1997 Legislature removed the Superintendent of Public Instruction as an ex officio member of the TRB and also required that one of the TRB members be actively teaching in the classroom.

¹⁸ An MUS faculty member or administrator who was, prior to July 1, 1993, a member of the TRS or PERS could remain a member of the system in which he or she was a member prior to July 1, 1993. There are limited circumstances under which an ORP member can transfer to another of the state's retirement systems.

compensate firemen¹⁹ disabled in the line of duty only, i.e., there weren't any specific provisions for firefighters killed in the line of duty or who had worked as firefighters for years (until at least age 45 at which time they were forced into retirement). By 1911, however, the system had metamorphosed into a disability plan and a retirement system.²⁰

The retirement system for firefighters was followed by separate systems for teachers, public employees in general, police officers, sheriffs, highway patrol officers, game wardens, judges, and university system faculty and administrators. Where the employees were employed by a local government jurisdiction—county, municipality, school board—the system were initially established by local governing body. For general government employees, the state system (PERS) was the first to be established and the state was also the initial sponsor for the systems for game wardens (1963), judges (1967), and highway patrol officers (1974).

As the separate state systems developed for the different employee groups, local governments and their covered employees were given the option of joining the applicable state system. Gradually, most local governments and their covered employees merged their local systems into the state's systems. While a few localities continue to sponsor their own plans (for police or for firefighters), the majority of local government employees are members of one of the state's systems. As an aside, a local government that had joined one of the state's systems is statutorily authorized to secede from the state system provided the withdrawing entity pays the actuarial cost of withdrawing, which is one reason that such withdrawals are increasingly rare.

Montana's public employees are now almost universally required to participate from their first day of employment in one of the state-sponsored retirement system for public employees. Many of those who aren't required to participate, e.g., state and local elected officials and certain "exempt" employees, are given the choice to participate or not, and a few local jurisdictions remain sponsors of local systems.

¹⁹ "Firemen", not "firefighter", is the term used in the law and in 1899, the force of a fire department was likely to be composed of men only. The law also lists as "qualifications of firemen": qualified voter of the city or town; less than 45 years of age; and having passed a physical examination by a practicing physician. (See Sec. 5, HB 17, p. 74, L. 1899.)

²⁰ For a more complete discussion of the history and development of Montana's public employee retirement systems see *An Overview of the Development and Status of Montana's Public Employee Retirement Systems* by David D. Bohyer and David S. Niss, October 2007, Legislative Services Division.

CHAPTER 4

COMPARING THE PLANS

Benefit Formula Multipliers

The basic pension benefit formula used to calculate the retirement benefit of a member of all but one²¹ of Montana's state-sponsored defined benefit plans is expressed as:

$$X\% \text{ (or } 1/Y) \times \text{ final average salary} \times \text{ years of service}$$

The percentage (or fraction) used in the benefit formula is sometimes referred to as the "escalator" or "multiplier". The multiplier used is different in each plan and ranges from a low of 1.667% for the TRS to a high of 3.333% for the Judges' Retirement System.²²

PERS benefit multipliers: Most general employee public DB plans nationwide have a formula multiplier between 1.9% and 2.1%. The next most frequent range of multipliers is 1.5% to 1.7%.²³ Thus, Montana's generally applicable PERS benefit formula multiplier of 1.786% is slightly lower than the most frequent range of multipliers, but slightly above the second most frequent range.²⁴

TRS benefit multipliers: Data collected by the National Education Association (NEA) shows that the most frequent multiplier among the large pension plans that the NEA surveyed was between 2.0% and 2.24% for each year of service. The second most frequent multiplier was between 1.5% and 1.74%. Slightly more than half of the systems surveyed had a multiplier higher than 2% while about one-third of the systems had a multiplier of 1.74% or less.

²¹ The formula is not applicable to members under the Volunteer Firefighters Compensation Act. See section 19-17-404, MCA. The current monthly benefit is \$7.50 x years, with a maximum monthly benefit of \$150.

²² The 3.33% multiplier in the JRS applies to the first 15 years of service only. For JRS service in excess of 15 years, the multiplier is 1.785%.

²³ *2006 Comparative Study of Major Public Employee Retirement Systems*, by William Ford, Wisconsin Legislative Council, December 2007

²⁴ The multiplier for a member of the PERS/DB plan who accrues 25 years or more of service is 2% for each year of service (rather than 1.786%).

Thus, Montana's TRS benefit formula (1.667%) is lower than in most states, but in the middle of the second most frequent range of multipliers.²⁵

Public safety plans' benefit multipliers: Retirement benefits for public safety personnel are generally higher in most states than for general employees. Potential reasons for the higher benefits include: (1) the benefits provide compensation for the higher risk in public safety professions; (2) public safety professionals tend to have shorter lives and are entitled to the actuarially determined higher benefit; and (3) public safety positions are often not covered by Social Security. In Montana, positions covered by MPORS, FURS, or HPORS are not covered by Social Security. In 1997, the Legislature equalized the multipliers among MPORS, FURS, SRS, AND HPORS by raising the sheriffs' and firefighters' multipliers to 2.5% and, in 2001, increased the multiplier for the GWPORS to 2.5% as well.²⁶

Final Average Compensation

The majority of public pension plans nationwide determine final average compensation or salary based on the average of the highest compensation over 3 consecutive years or 36 consecutive months. Montana's plans are generally consistent with this practice. The 1997 Legislature made use of "highest average compensation" (HAC) more consistent across Montana's public retirement systems. The PERS, JRS, HPORS, SRS, GWPORS, FURS use highest average compensation (HAC). The MPORS uses final average compensation (FAC). By definition, FAC is not the average of a member's highest 3 years of compensation, but the average of the member's final 36 months of compensation. For members of MPORS, it usually works out that a member's final 36 months of compensation are the member's highest 36 months of compensation, so there is little practical difference. The TRS uses average final compensation (AFC), which is the 3 consecutive years of full-time service that yield the highest average.

²⁵ National Education Association, *Characteristics of Large Public Pension Plans*, December 2006, pp. 86-87.

²⁶ The State Administration and Veterans' Affairs Interim Committee heard testimony from representatives of several public safety employee groups that the employees intend to further "equalize" public safety employee retirement benefits by coordinating and possibly expanding the definitions of "compensation", "final average compensation", or "highest average compensation".

The NCSL Public Pension Working Group²⁷ cautions that legislatures should be wary of salary "spiking" where, in order to enhance a retirement benefit, an employee's salary is inflated just prior to the employee's retirement. In fact, to account for additional costs associated with salary spiking, actuaries for Montana's TRS had included a "load factor" when making salary assumptions for employees of the MUS. The load factor was considered to be necessary because of the history within the MUS of significantly increasing its TRS member-employees' salaries immediately preceding the employees' retirement.²⁸

Years of Service and Retirement Age

The years of service and age requirements for normal retirement eligibility affect both the assumptions about and the actual experience of how many years contributions will be and are made into the plan and how long the benefits will be and are paid after retirement. Historically, the purpose of a retirement plan was to provide financial security after the employee's working career was over, i.e., when the employee could no longer work. Thus, typical retirement age was about 65 years suggesting the employee had worked for about 40 years or more.²⁹ Therefore, it was reasonable to fund any unfunded liabilities over the working career of an employee. As the concept emerged that one could or even should retire while still able to "enjoy" retirement, the typical retirement age fell to 60 years or less and an employee's working career gradually decreased from 40 years or more to 30 years or even less.

According to a 2006 comparative study of large public retirement systems performed by Wisconsin Legislative Council staff (hereafter, "Wisconsin report"), the public sector norm for retirement eligibility without a reduced

²⁷ The National Conference of State Legislatures coordinated and sponsored the Public Pensions Working Group during the mid-1990s. Among other things, the Working Group prepared and published, through NCSL, *Public Pensions: A Legislator's Guide* in May 1995. The Pensions Working Group was drawn from the Fiscal, Intergovernmental Affairs and Oversight Committee of NCSL, the successor to the Fiscal Affairs and Oversight Committee and the Pensions Committee.

²⁸ Montana Teachers Retirement System, email from David Senn, TRS Executive Director. See also May 28, 1997, letter to TRS from Milliman & Robertson, Inc., Actuaries & Consultants.

²⁹ For example, Social Security, when enacted in 1935, established 65 years of age as the age at which an eligible citizen became entitled to full benefits. Of course, in 1933 the life expectancy of U.S. citizens was slightly less than 65 years and is considerably less than the nearly 78 years it is now. Additionally, the number of years that a Social Security recipient is expected to receive benefits has increased from just under 14 years in 1950 to not quite 19 years currently. See "Table 27. Life expectancy at birth, at 65 years of age, and at 75 years of age, by race and sex: United States, selected years 1900–2005" in *Health, United States, 2007*, pub. National Center for Health Statistics, Hyattsville, MD: 2007.

benefit ranges from a high of age 65 to a low of age 50, with various combinations of years of service and age requirements.³⁰ A trend toward reducing the retirement age eligibility criteria has slowed and may be stabilizing at around age 60.

Many public employee DB plans have adopted "X years and out" provisions, which allow members to receive full benefits at any age if the member has served a certain number of years. In Montana, four of the five public safety retirement plans—sheriffs, police, firefighters, and highway patrol—provide for normal retirement after 20 years regardless of age. In the GWPORS, a member must accrue 20 years of service and be at least age 50. For TRS members, the number of years is 25 and for PERS/DB members, 30 years are required.

In public safety professions, there is an occupational incentive to leave the profession when age and "burn out" begin to affect job performance. Thus, the typical working career of most public safety officers is about 20 years. For general public employees, the majority of public pension plans surveyed in the Wisconsin report require a member to work at least 30 years to retire at any age or to be at least 55 years old in order to be eligible for a normal service retirement.³¹

One policy consideration for lawmakers is that reducing the minimum number of years of service or the minimum age required for retirement eligibility in a DB plan results in less time to accumulate contributions and, especially, earnings in the plan's trust fund, less time to prudently amortize any unfunded liability (which is based on the length of working careers), and a longer time to pay out benefits. The result is a higher normal cost and, most likely, a higher cost to pay off liabilities.

Vesting

A member becomes entitled to receive some retirement benefits—i.e., he or she "vests" or becomes "vested"—when the member has contributed to the

³⁰ 2006 *Comparative Study of Major Public Employee Retirement Systems*, by William Ford, Wisconsin Legislative Council, Dec. 2007, pp. 9-11.

³¹ *Ibid.*, pp. 12-14.

system for a certain number of years. According to the Wisconsin report, there is a continuing trend toward reducing the number of years of service required for vesting. In 2006, three-quarters of surveyed public employee DB systems required 5 years or less of service to vest, which is consistent with federal vesting requirements that apply to private-sector pension plans. Nevertheless, the Wisconsin report points out that public pension plans remain more conservative than the private sector plans as 20% of the public plans surveyed still require 10 years or more of service for a member to vest.³²

In 1997, Montana's Legislature established 5-year vesting in each of Montana's public retirement plans. This change was not anticipated to significantly affect actuarial funding within the affected plans and there has been no indication of significant actuarial effects from the changes.

Early Retirement

Early retirement provisions allow members to draw a monthly retirement benefit earlier than otherwise required under normal eligibility requirements. Usually, the benefit provided is reduced according to actuarial calculations from what the benefit would have been had the member reached normal retirement age or completed the requisite years of service. The Wisconsin study shows that nearly 90% of the public plans surveyed allow some type of early retirement. The most commonly used eligibility requirement for early retirement is age 55.

Postretirement Benefit Increases

Prior to 1997, Montana's legislatures were periodically persuaded to provide *ad hoc* increases to the monthly benefits of existing retirees. While the increases were welcomed by the beneficiaries and, perhaps, were warranted by objective measures, they added to the unfunded liabilities of the systems that were affected.

In 1997, Montana's legislature enacted a 1.5% "guaranteed annual benefit adjustment" (GABA) for retirees in all systems except for the TRS, VFCA,

³² *Ibid.*, p 16.

and ORP.³³ A similar 1.5% GABA was enacted for TRS in 1999. In 2001, the Legislature increased the GABA for the PERB-governed systems from 1.5% to 3%, then, in 2007, reduced it back to 1.5% for employee-members new to the PERS/DB and SRS plans after June 30, 2007.^{34, 35} For retirees in the covered systems and who, in some systems, elected GABA instead of minimum benefit provisions, the GABA provides for an annual, prefunded, automatic and statutorily-prescribed postretirement increase. The adoption of the GABA concept has moved Montana away from the significant costs of periodic, *ad hoc* adjustments that are not prefunded through regular employee or employer contributions.

Plan-to-Plan Comparisons

Tables 1 through 9 provide a snapshot overview of Montana's public employee retirement plans in terms of: benefit eligibility, benefit formulas, benefit multipliers, service requirements, early retirement provisions, plan demographics, financial health, and other information. More precise information can be obtained from legislative staff or the respective staffs of the MPERA, TRS, or BOI.³⁶

³³ As a money purchase DC plan, the ORP cannot provide for a postretirement benefit increase. The PERS/DC plan did not exist in 1997 but, had it existed, also could not provide a postretirement increase.

³⁴ Ch. 149, L. 2001.

³⁵ Ch. 371, L. 2007.

³⁶ The information in the tables was compiled by Scott Miller, MPERA staff attorney, and staff of the MPERA, from a variety of sources, including: MPERA annual reports; BOI annual reports; and MCA.

TABLE 1
BENEFIT ELIGIBILITY AND BASIC BENEFIT FORMULA

| | PERS DEFINED BENEFIT (DB) PLAN (1945) | SHERIFFS' (SRS) (1974) | MUNICIPAL POLICE (MPORS) (1974) | FIREFIGHTERS' UNIFIED (FURS) (1981) | HIGHWAY PATROL (HPORS) (1971) | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) (1963) | JUDGES' (JRS) (1967) |
|--|--|--|---|---|--|--|---|
| Minimum service and age requirements to receive full (unreduced) normal retirement benefit | 30 yrs service, any age or 5 yrs service and age 60 or age 65 regardless of service | 20 yrs service, any age | 20 yrs service, any age | 20 yrs service, any age or age 50 with 5 yrs service | 20 yrs service, any age | 20 yrs service and age 50 or age 55 with 5 yrs | 5 yrs service and age 60 |
| Minimum service requirement before being vested | 5 years | 5 years | 5 years | 5 years | 5 years | 5 years | 5 years |
| Service retirement benefit formula | $\frac{1}{56} \times \text{HAC}^1 \times \text{yrs of service}$ ($\frac{1}{56} = 1.78571\%$) with 25 or more years of membership service $\frac{1}{50} \times \text{HAC} \times \text{yrs of service}$ ($\frac{1}{50} = 2.0\%$) | $2.5\% \times \text{HAC} \times \text{yrs of service}$ | $2.5\% \times \text{FAC}^2 \times \text{yrs of service}$ Pre-7/1/77: FAC = monthly compensation of last year | $2.5\% \times \text{FAC} \times \text{yrs of service}$ Pre-7/1/81 who did not elect GABA: - with less than 20 yrs, greater of: $2.5\% \times \text{FAC} \times \text{yrs}$ or $2\% \times \text{FMC}^3 \times \text{yrs}$ - with more than 20 yrs: $50\% \times \text{FMC}$ plus 2% of FMC for each year over 20 | $2.5\% \times \text{HAC} \times \text{yrs of service}$ | $2.5\% \times \text{HAC} \times \text{yrs of service}$ | $3.33\% \times \text{HAC} \times \text{yrs of service to 15 yrs} + 1.785\% \times \text{HAC} \times \text{years of service over 15 yrs}$ Pre 7/1/97: HAC = current salary Post 1/7/97 and those who elected GABA: HAC = highest 36 months |
| Benefit formula is actuarially reduced for early retirement | Yes actuarially reduced benefit at 25 years service any age or age 50 | Yes actuarially reduced benefit at age 50 with 5 yrs service | No | No | No | No | Yes: Actuarially reduced benefit at any age with 5 yrs service, if involuntarily terminated |

Source: Title 19, Montana Code Annotated, 2007

¹ HAC = highest average compensation = average compensation of the 3 highest consecutive years of service.

² FAC = final average compensation = average salary over the last 36 consecutive months of service.

³ FMC = final monthly compensation = monthly salary last received by member.

* GABA = An automatic annual Guaranteed Annual Benefit Adjustment; an annual increase in a recipient's monthly benefit amount.

TABLE 2
DISABILITY BENEFITS

| | PERS DEFINED BENEFIT (DB) PLAN (1945) | SHERIFFS' (SRS) (1974) | MUNICIPAL POLICE (MPORS) (1974) | FIREFIGHTERS' UNIFIED (FURS) (1981) | HIGHWAY PATROL (HPORS) (1971) | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) (1963) | JUDGES' (JRS) (1967) |
|---|--|--|---|---|--|---|--|
| Eligibility criteria for disability benefit | At least 5 yrs of service - totally unable to perform essential tasks of covered position- permanent or of uncertain duration | same as in PERS DB plan | same as in PERS DB plan | same as in PERS DB plan | same as in PERS DB plan | same as in PERS DB plan | same as in PERS DB plan |
| Non-duty-related disability benefit | Pre-2/24/91: greater of 90% of normal (1.786%) formula, or 25% of HAC Post-2/24/91 or election: normal retirement formula (based on age 60, no actuarial reduction) | Actuarial equivalent of normal (2.5%) retirement formula | Pre-7/1/77: Normal (2.5%) retirement formula, but minimum of 50% of FMC Post-7/1/77: 50% FAC for 20 yrs or less and 2.5% FAC for each year over 20 | 50% FAC for 20 yrs or less and 2.5% FAC for each year over 20 | Actuarial equivalent of normal (2.5%) retirement formula | Actuarial equivalent of normal retirement formula for first 15 yrs service and 1.785% after 15 years) | Actuarial equivalent of normal retirement formula (3.33% for first 15 yrs service and 1.785% after 15 years) |
| Duty-related disability benefit | Same as non-duty related | 50% of HAC | Same as non- duty-related | Same as non- duty-related | 50% of HAC | 50% of HAC with at least 5 yrs of service | Non-GABA: 50% of current salary of sitting judge With GABA: 50% of HAC |
| Actuarial cost to plan (reported in June 30, 2008, actuarial valuation) | 0.31% | 0.76% | 1.80% | 2.03% | 0.78% | 0.72% | 0.63% |

TABLE 3
RETIREE AND BENEFIT RECIPIENT DATA
(Based on June 30, 2008, Actuarial Valuations and MPERA data)

| | PERS DEFINED BENEFIT (DB) PLAN (1945) | SHERIFFS' (SRS) (1974) | MUNICIPAL POLICE (MPORS) (1974) | FIREFIGHTERS ' UNIFIED (FURS) (1981) | HIGHWAY PATROL (HPORS) (1971) | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) (1963) | JUDGES' (JRS) (1967) |
|---|--|---|---|---|--|--|---|
| Number of benefit recipients | 16,627 | 394 | 636 | 535 | 290 | 120 | 50 |
| Average age of current retirees | 72 yrs | 62 yrs | 66 yrs | 67 yrs | 68 yrs | 68 yrs | 80 yrs |
| Average retirement age | 59 yrs | 52 yrs | 47 yrs | 50 yrs | 49 yrs | 55 yrs | 66 yrs |
| Average years of service at retirement | 19.34 yrs | 18.76 yrs | 19.33 yrs | 23.61 yrs | 23.83 yrs | 23.23 yrs | 15.33 yrs |
| Average monthly benefit (service retirement) | \$975 | \$1,756 | \$2,079 | \$2,387 | \$2,109 | \$1,760 | \$3,440 |
| Post-retirement benefit adjustments | 3.0% GABA* (after 1 year) if hired before 7/1/07 1.5% GABA if hired on or after 7/1/07 | 3.0% GABA (after 1 year) if hired before 7/1/07 1.5% GABA if hired on or after 7/1/07 | Pre-7/1/97 who did not elect GABA: 1/2 monthly salary of new officer all post-7/1/97 or who elected GABA: 3.0% (after 1 year) | Pre-7/1/97 who did not elect GABA: 1/2 monthly salary of new firefighter all post-7/1/97 or who elected GABA: 3.0% (after 1 year) | Pre-7/1/97 who did not elect GABA: 2% of base salary of probationary officer all post-7/1/97 or who elected GABA: 3.0% (after 1 year) Pre- 7/1/97: supplemental lump sum to certain eligible recipients, paid from motor vehicle registration fees | 3.0% (after 1 year) if hired before 7/1/07 1.5% GABA if hired on or after 7/1/07 | Pre-7/1/97: benefits increased same as salary of sitting judge all post-7/1/97 or who elected 3.0% GABA (after 1 year) |
| Social security coverage | Yes | Yes | No | No | No | Yes | Yes |

* GABA = Guaranteed Annual Benefit Adjustment, an annual increase in a recipient's monthly benefit amount.

TABLE 4
ACTIVE MEMBERSHIP DATA
Does not include retirees or other benefit recipients
(Based on June 30, 2008, Actuarial Valuations)

| | PERS DEFINED BENEFIT (DB) PLAN (1945) | SHERIFFS' (SRS) (1974) | MUNICIPAL POLICE (MPORS) (1974) | FIREFIGHTERS' UNIFIED (FURS) (1981) | HIGHWAY PATROL (HPORS) (1971) | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) (1963) | JUDGES' (JRS) (1967) |
|--|---|------------------------------|--|--|--|--|----------------------------|
| Total active members | 28,293 | 1,109 | 673 | 525 | 212 | 885 | 51 |
| Average age of actives | 48.4 yrs | 40.2 yrs | 38.5 yrs | 39.0 yrs | 39.7 yrs | 40.4 yrs | 57.2 yrs |
| Average years of service of actives | 9.9 yrs | 6.5 yrs | 8.9 yrs | 10.3 yrs | 9.6 yrs | 5.7 yrs | 11.6 yrs |
| Average annual salary of actives | \$35,143 | \$42,626 | \$47,449 | \$51,150 | \$50,505 | \$37,410 | \$99,917 |
| Number of participating employers | 528 | 57 | 27 | 19 | 1 | 7 | 1 |
| Employers = annualized payroll (2008 Valuation) | \$994.3 million | \$47.3 million | \$32.9 million | \$27.7 million | \$11.0 million | \$34.2 million | \$5.2 million |

TABLE 5
CONTRIBUTIONS, COSTS, AND ACTUARIAL DATA
(Based on June 30, 2008, Actuarial Valuations)

| | PERS DEFINED BENEFIT (DB) PLAN (1945) | SHERIFFS' (SRS) (1974) | MUNICIPAL POLICE (MPORS) (1974) | FIREFIGHTERS' UNIFIED (FURS) (1981) | HIGHWAY PATROL (HPORS) (1971) | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) (1963) | JUDGES' (JRS) (1967) |
|--|--|------------------------------|--|---|---|--|----------------------------|
| Employer contribution as percentage of payroll | 7.035% School Districts: 6.8% State: 0.235% Local Gov. Employers: 6.935% State: 0.1% | 9.825% | 14.41% | 14.36% | 26.15% | 9.0% | 25.81% |
| Employee contribution as percentage of salary | 6.9% | 9.245% | Non-GABA: Pre-7/1/75: 5.8% Pre-7/1/79: 7.0% Pre-7/1/97: 8.5% With GABA: 9% | Pre-7/1/97 not electing GABA: 9.5% Post-7/1/97 or electing GABA: 10.7% | Pre-7/1/97 not electing GABA: 9.0% Post-7/1/97 or electing GABA: 9.05% | 10.56% | 7% |
| Additional funding from other sources as a percentage of payroll | None | None | State General Fund: 29.37% | State General Fund: 32.61% | Driver's license fees: 10.18% | None | None |
| Total available contributions as percentage of payroll | 13.935% (.04% transferred to education fund) | 19.07% | 52.78% | 57.66% | 45.38% | 19.56% | 32.81% |
| Normal costs as percentage of payroll | 12.13% | 19.24% | 26.65% | 26.15% | 22.25% | 18.54% | 25.12% |
| Percentage used to fund unfunded liabilities | 1.765% | 0 | 26.13% | 31.51% | 23.13% | 1.02% | 7.69% |
| Actuarial liabilities(rounded) | \$4.5 billion | \$205 million | \$328 million | \$287 million | \$135 million | \$83 million | \$39 million |

A Legislator's Guide to Montana's Public Retirement Systems: 2008

| | PERS DEFINED BENEFIT (DB) PLAN (1945) | SHERIFFS' (SRS) (1974) | MUNICIPAL POLICE (MPORS) (1974) | FIREFIGHTERS' UNIFIED (FURS) (1981) | HIGHWAY PATROL (HPORS) (1971) | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) (1963) | JUDGES' (JRS) (1967) |
|---|---|------------------------------|--|--|--|--|----------------------------|
| Actuarial Value Funded ratio (rounded)(percentage of liabilities covered by reported assets) | 91% | 98% | 65% | 72% | 75% | 93% | 157% |
| Unfunded liability (surplus)(rounded) | \$439 million | \$5.1 million | \$115 million | \$81 million | \$33 million | \$5.9 million | (\$23 million) |
| Years to amortize unfunded liability | 24.9 yrs | 16.3 yrs | 18.6 yrs | 11.3 yrs | 17.4 yrs | 13.0 yrs | 0 (surplus) |
| Market value of assets (rounded) | \$4.1 billion | \$189 million | \$200 million | \$195 million | \$96 million | \$73 million | \$59 million |
| Market Value Funded ratio (rounded)(percentage of liabilities covered by reported assets) | 85% | 92% | 61% | 68% | 71% | 88% | 149% |

Sources: June 30, 2008, Actuarial Valuations

TABLE 6
INVESTMENT DATA

| | PERS DEFINED BENEFIT RETIREMENT PLAN (DBRP) | SHERIFFS' (SRS) | MUNICIPAL POLICE (MPORS) | FIREFIGHTERS' UNIFIED (FURS) | HIGHWAY PATROL (HPORS) | GAME WARDENS' AND PEACE OFFICERS' (GWPORS) | JUDGES' (JRS) |
|--|---|--------------------------------|--------------------------------|------------------------------------|--------------------------------|--|--------------------------------|
| Amount invested, rounded | \$3.9 billion | \$188.6 million | \$191.1 million | \$185.2 million | \$96.2 million | \$73.3 million | \$58.8 million |
| Market rate of return for composite index, FY 2008 | -5.61% | -5.56% | -5.75% | -5.66% | -5.58% | -5.51% | -5.58% |
| Market rate of return on the fund in 2008, all assets | -4.86% | -4.84% | -5.01% | -4.91% | -4.86% | -4.80% | -4.85% |
| Market rate of return for composite index, 5-year period | 7.90% | 7.82% | 7.68% | 7.72% | 7.86% | 7.72% | 7.81% |
| Rate of return on the fund, 5-year period | 8.47% | 8.39% | 8.26% | 8.29% | 8.44% | 8.28% | 8.39% |
| Objective relative to actuarial investment assumption met in FY 2008? | No | No | No | No | No | No | No |
| Objective relative to actuarial investment assumption met in 5-yr period? | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Asset allocation objectives: Fixed Income Real Estate Equity | 22 - 32% 0 - 8% 60 - 70% | 25 - 35% 4 - 8% 60 - 70% | 25 - 35% 4 - 8% 60 - 70% | 25 - 35% 4 - 8% 60 - 70% | 25 - 35% 4 - 8% 60 - 70% | 25 - 35% 4 - 8% 60 - 70% | 25 - 35% 4 - 8% 60 - 70% |
| Actual Asset allocation: Fixed Income Real Estate Equity | 25.7% 4.5% 67.7% | 26.6% 4.3% 67.2% | 26.9% 4.3% 68.7% | 26.8% 4.3% 68.0% | 26.7% 4.3% 67.9% | 26.3% 4.3% 66.8% | 26.6% 4.3% 67.3% |

A Legislator's Guide to Montana's Public Retirement Systems: 2008

| | PERS DEFINED BENEFIT RETIREMENT PLAN (DBRP) | SHERIFFS' (SRS) | MUNICIPAL POLICE (MPORS) | FIREFIGHTERS' UNIFIED (FURS) | HIGHWAY PATROL (HPORS) | GAME WARDENS' AND PEACE OFFICERS' (GWPOS) | JUDGES' (JRS) |
|--|---|--------------------|--------------------------------|------------------------------------|------------------------------|---|------------------|
| Percentage growth in total liabilities between 2007 valuation and 2008 valuation | 7.2% | 8.2 % | 5.5% | 6.6% | 5.0% | 14.3% | 7.0% |
| Percentage change in total assets between 2007 valuation and 2008 valuation | -6.1% | -4.1% | -5.1% | -3.0% | -6.3% | -0.1% | -5.1% |

Sources: Public Employees' Retirement Board, Financial and Actuarial Reports, and Title 19, Montana Code Annotated, 2007; FY2008 Montana Board of Investments information.

* Investment objective: Meet or beat the actuarial return assumption of 8%, while outperforming the market indices for each asset class over any current 5-year period.

TABLE 7
VOLUNTEER FIREFIGHTERS' COMPENSATION ACT
 (Based on June 30, 2008, Actuarial Valuation)

| PENSION PLAN FEATURES | VOLUNTEER FIREFIGHTERS' PENSION FUND(1965) |
|---|---|
| Minimum service and age for normal (unreduced) retirement | Age 55 and 20 years of service; or Age 60 and 10 years of service |
| Vested | 10 years |
| Basic benefit formula | \$7.50 per year of service, up to maximum of \$225 per month |
| Disability | \$7.50 per year of service, with a minimum of \$75 per month up to a maximum of \$225 per month |
| Death benefit | \$7.50 per year of service (maximum of 40 months including any amounts retiree received) |
| Membership | 1,082 retirees and beneficiaries 2,301 active members 793 vested inactive (terminated) members 4,176 total members |
| Average age of active members | 44.6 years old |
| Average years of service of active members | 9.2 years |
| Average benefit for service retirees | \$135 per month |
| Contributions | 5% of insurance premium taxes collected (See Section 19-17-301, MCA) |
| Actuarial liabilities | \$32.7 million |
| Actuarial value of assets | \$27.5 million |
| Unfunded liability | \$5.2 million |
| Years to Amortize | 5 yrs |
| Funded ratio | 84% |

TABLE 8
PERS DEFINED CONTRIBUTION RETIREMENT PLAN (DCRP)
 (Operational July 1, 2002)

| | |
|--|--|
| Membership | All active PERS members will have 12 months to make a one-time, irrevocable choice between the DBRP and DCRP plans. |
| Employee Contributions | 6.9% of salary |
| Employer Contributions | 7.035%* of salary allocated as follows: — 0.04% to an educational fund — 2.37% to PERS DB plan as plan choice rate — 4.19% to member accounts — 0.3% to disability trust fund — 0.135% to PERS DB plan to reduce the plan choice rate unfunded actuarial liability, or to the long-term disability plan trust fund once the PCR UAL is retired (increasing to 0.27% on July 1, 2009) |
| Total contributions to member accounts | 11.09% of salary |
| Investment choices | 15 funds |
| Vesting | 5 years for employer contributions and investment earnings on those contributions, but members have immediate control over how employer and employee contributions are invested |
| Benefits | Contributions plus investment earnings, minus administrative expenses; payable at any time after termination, with a possible federal tax penalty for withdrawal before age 59 1/2. |
| Disability benefit | A defined disability benefit based on a $1/56 \times \text{HAC} \times \text{years of service}$ formula, similar to what is provided in the PERS DBRP. |
| Death/survivorship benefit | Member's account balance |
| Plan administration | PERB is the plan's board of trustees—Great West is the plan's record keeper |

*On July 1, 2009, this will increase to 7.17%

CHAPTER 5

ASSESSING FINANCIAL HEALTH

This chapter discusses the financial health of Montana's public retirement systems. Many factors must be considered whenever assessing the financial health of any defined benefit plan, undoubtedly many more than are involved in simply comparing assets with liabilities, though that is the basic concern.

Assessing the financial health of any DB plan involves understanding that assets include both current and future contributions plus investment earnings and that liabilities include past, present, and future liabilities and expenses. The effort to develop that understanding may become more complex because, although current and future contributions and some liabilities (for benefits) can be estimated with a relatively high level of confidence, various economic and demographic assumptions cannot be estimated so confidently when projecting out 30, 40, or more years into the future. Consequently, analyzing and determining the financial health of a DB plan requires the education, training, experience, and mathematical expertise of certified actuaries.

Actuarial valuations are not required to determine the financial status of DC plans because DC plans do not have unfunded liabilities or rely on projections to estimate costs. Defined contribution plans don't have unfunded liabilities because DC plans don't promise a specified benefit in the future. Rather, a DC plan commits only the amount of contributions.

The benefit paid to a retiree under a DC plan is specific to each retiree, and there is no objective or promise to ensure that the members' benefits at retirement are equal among the members. Instead, a member's benefit at retirement is equivalent to the member's accumulated contributions and realized investment returns. What is at issue as a matter of public policy is the quality of investment options and the sufficiency of contributions. Once "quality" and "sufficiency" have been established by policymakers, the DC plan member is responsible for his or her investment (and, perhaps, contribution) choices and bears the risks and rewards of market performance.

Actuarial Valuations

As earlier summarized, an actuarial valuation is a mathematical investigation to determine the financial condition of a DB retirement system at a particular point in time and to project the system's future funding needs. There are several accepted actuarial methods, including: entry age cost, unit credit, aggregate cost, attained age, and projected benefit.

The Wisconsin report surveyed 85 statewide public retirement plans covering general classified employees and teachers and showed that 78% of the plans used the entry age cost method. This is the same method used by actuaries for Montana's DB plans.

The "entry age cost method" is an actuarial cost method whereby a level cost for each employee is established. Under this method the actuarial present value of projected benefits for each individual member included in the valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial liability.³⁷ The cost is considered to accrue annually from the first day of employment to termination. Using actuarial assumptions, the normal cost of benefits as they accrue can be mathematically determined, thus ensuring that each employee's defined benefit can be paid when the benefit is due.

To help determine the amount or rate of contributions necessary to fund total costs, actuaries must make assumptions about such things as: rates of employment termination, retirement, mortality, and disability; withdrawal rates; salary increases; investment returns from future market gains and losses; and administrative expenses. These assumptions and the mathematics used by actuaries are the backdrop behind the term "actuarial". In Montana, the governing boards—PERB and TRB—are responsible for establishing the assumptions.

³⁷ *Montana Public Employees' Retirement System, State of Montana: Actuarial Valuation as of July 1, 2008*, Mark O. Johnson, FSA, MAAA, and Patricia Ann Kahle, FSA, MAAA, EA; Milliman, Inc., p. 27.

Each actuarial valuation determines the following financial information:

(1) The value of current assets or "actuarial value of assets": the adjusted market value of the system's assets (i.e. holdings). In many DB plans, the actual, realized investment gains and losses are smoothed over a 3- to 6-year period.³⁸

(2) The normal cost contribution rate or simply "normal cost": the percentage of each member's salary that is necessary to fund benefits as they are being earned (i.e., current benefits) by active members (i.e., working employees).

(3) Future liabilities: the present value of current benefits as they will accrue in the future for current members, including working employees and current benefit recipients.

(4) Total liabilities: the present value of all past and future liabilities for all current active and retired members.

(5) Unfunded liabilities: the portion of total liabilities that cannot be funded by current assets plus anticipated future contributions and investment earnings. Total liabilities minus future liabilities minus current assets equals unfunded liabilities.

(6) Amortization period of unfunded liabilities: the period of time it will take to pay off current unfunded liabilities given available contributions.

(7) Actuarial soundness: a system is actuarially sound when contributions are sufficient to pay for the normal costs of benefits as they accrue and to make payments on the unfunded liability.

The entry age cost method is used by actuaries to value all of Montana's DB public retirement systems. Other systems may use a different method.

An actuarial valuation of each statewide public employee retirement system is conducted every year through June 30 of the valuation cycle. Both the Public Employees' and the Teachers' Retirement Boards contract with actuarial firms to provide actuarial valuations.

³⁸ The actuarial valuations of the PERB-managed DB systems and plans "smooth" actual gains and losses over a 4-year period. The actuarial valuations of the TRS have been calculated differently in recent years where, in some years, actual gains and losses were smoothed over several years and, in other years, gains and losses were recognized in a single year.

Actuarial soundness: Montana's Constitution, Art. VIII, sec. 15, requires that the pension funds be managed on an actuarially sound basis. However, the constitutional language doesn't define "actuarially sound".

To bridge the definition void, the Legislature established in statute that each system administered under the PERB must be funded on an "actuarially sound basis" and defined "actuarially sound basis" as meaning that system funding is sufficient to amortize unfunded liabilities in 30 years or less.³⁹

Actuarial gains and losses: Because actuarial assumptions are crucial to the valuation and funding of DB plans, "experience studies" are conducted at least every 8 to 10 years. An experience study examines the actual history and experience of the system. Assumptions about future inputs and events can then be adjusted, if necessary, to keep assumptions consistent with the actual experience of the plan. Outside actuaries may also periodically audit the valuations, the methodology, the assumptions, or other elements integral to assessing the financial status of the plan.

Differences between assumed and actual experience results in actuarial gains and losses. The differences are critically important to system health, because a system's assets can show *actual* gains (increases in value), yet fall short of the *actuarial* gains necessary to fully fund the system.

For example, the PERS/DB plan assumes that plan assets will earn an 8% return on investments. Thus, if plan assets equal \$1 billion at the start of the year, the assumption is that the value of plan assets at the end of the year will increase to \$1.08 billion. However, if the invested assets return only 7% for the year, the plan's assets will show actual growth of \$70 million—pretty good for this year's markets to date—but will fall \$10 million short of the actuarially-assumed \$80 million return. Consequently, the *actual value* of plan assets can increase in nominal dollars, sometimes substantially, and yet show a deficit from the *actuarial value* anticipated (based on assumptions). Stated another way, the 7% *actual* (or real) return on invested assets would appear as a 1% *actuarial* deficit.

³⁹ Ch. 287, L. 1997.

The annual reports from the PERB and the TRB provide more specific information on gains or losses for each of the DB retirement plans within their respective domains.

Indicators of Financial Strength

Each of Montana's retirement systems is subject to analysis by an actuary and all except the TRS have been determined to be actuarially sound.⁴⁰ But, aside from this general certification, one way to examine financial health is to look at a system's accrued liabilities in terms of the percentage of each system's accrued actuarial liabilities that are funded by the actuarial value of assets. The higher the percentage the stronger the system's funding. Another way is to determine the system's unfunded actuarial liabilities (commonly referred to as UAAL or UAL) as a percentage of the system's total covered payroll. The lower this percentage the stronger the system's funding.⁴¹

Historical data further detailed in each of the retirement systems' respective financial reports shows system trends and whether a particular system is getting weaker or stronger. So far this decade there have been some relatively wide swings in the strength of several systems, specifically the TRS, PERS/DB plan, and SRS. The funded status of the systems has gone from actuarially sound from 2000-2004, then to actuarially unsound from 2005 to 2007, and back to actuarially sound.⁴² Those swings are due in part to the unprecedented volatility in the financial markets and in part to the changing contribution and benefit structures of the three systems.

⁴⁰ The assessment of soundness within each retirement system or plan is based on the ability of current contribution rates to amortize any unfunded actuarial liabilities in 30 years or less. As of June 30, 2008, the amortization period for the TRS was 31.1 years. (See *Teachers' Retirement System, State of Montana: Actuarial Valuation as of July 1, 2008*, Mark C. Olleman, MAAA and Craig J. Glyde, MAAA, Milliman, Inc., p. 1.)

⁴¹ Until 1995, the Governmental Accounting Standards Board (GASB) required public pension plans report the "pension benefit obligation", which GASB defined as a measure of the present value of pension benefits, adjusted for inflation (i.e., projected salary increases) but estimated on service earned only to date. However, GASB now requires reporting based on actuarial accrued liabilities.

⁴² The TRS was determined to be actuarially unsound as of July 1, 2008. See *Teachers' Retirement System, State of Montana: Actuarial Valuation as of July 1, 2008*, Mark C. Olleman, MAAA and Craig J. Glyde, MAAA, Milliman, Inc., p. 1.

Investment Assumptions and Performance

Investment return is the largest revenue source for Montana's public pension funds. Each retirement plan's trust fund is managed separately and invested by the Montana Board of Investments (BOI). The financial health of a DB retirement plan depends on the confluence of the myriad of actuarial assumptions with actual experience. Ultimately what matters is that each plan has the cash on hand to pay defined monthly benefits when due regardless of market swings.

Investment return assumptions: Actuaries for both the Public Employees' Retirement Board and TRS historically assumed an 8% average investment return. In 2004, the TRS reduced the assumed rate of return to 7.75%. The 2006 Wisconsin study showed that of the 85 public plans surveyed, 61 plans assume earnings of between 7% and 8%; 23 plans assume an 8% return or more.⁴³

Actuaries for Montana's DB plans smooth market gains and losses over 4 years to keep actual investment gains and losses in each year from causing wide swings in the funded ratio of the systems which, if they occur, could lead to a perception that a system may be in dire need of structural change. Such swings could indicate that structural change is in order, but could just as easily reflect the volatility of financial markets over a relatively short period of time.⁴⁴

Investment performance: Financial reports for the PERB/DB plan and other PERB-managed DB plans and reports by the BOI tend to highlight the growth in the book value of investment holdings (i.e., the market value of assets), but not the realized rate of return⁴⁵ in each year. The FY 2007 annual report

⁴³ 2006 *Comparative Study of Major Public Employee Retirement Systems*, by William Ford, Wisconsin Legislative Council, Dec. 2007, p. 33.

⁴⁴ Retirement systems' fund assets truly are invested for the long term—30 years at least—and are, therefore, believed to be able to withstand the historical ups and downs of the financial markets, particularly the swings seen within "equities" as an asset class.

⁴⁵ The BOI calculates the change in the book value (also called market value) of PERS assets, both in nominal dollars year-over-year and as a year-over-year percentage. The "book" value is the value of the asset as reported on the valuation date (June 30) in financial market publications. To "realize" the return implied by the year-over-year book value, the BOI would have had to sell all securities on the valuation date. The BOI also calculates the annual rate of return by dividing the actual income (not paper losses or gains) by the average book value of PERS assets for the year. The "average" is calculated by adding the beginning and ending book values, then dividing the sum by 2.

of the BOI shows that for the PERS/DB, the rate of return was about 6% in 1972, climbed to a peak of 11.85% in 1986, remained in double digits through 1990, then bounced around in the single digits for the next decade and a half.⁴⁶

Since the BOI began managing the PERS assets in 1972, the rate of return has averaged 8.17% annually. Between 1994 and 2007, the actuarially assumed rate of return of 8% was met or exceeded only once, in FY 2001. And between 2000 and 2007, the annual rate of return on PERS assets averaged only 6.20%, compared to 8.75% from 1972 through 1999.⁴⁷

The investment performances among the other public employee retirement systems managed by the PERB are very similar to the performance of the PERS/DB plan.

Investment allocation: Investment performance depends on asset allocation, among other factors. The BOI has slowly been shifting the allocation of pension fund investments from more assets in fixed-return investments toward more assets in equities because, historically, equities have delivered a greater risk-adjusted return. The Board has also diversified the portfolio by investing in real estate, private equity, and other asset classes.

Investment categories: Montana's pension fund investments encompass four major types of asset classes:

- Short Term Investment Pool, which is essentially cash;
 - ▶ Equities (including the Montana Common Stock Pool, Domestic Common Stock, International Common Stock, the MT Convertible Bond Pool, and Alternative Equities);
 - ▶ Fixed-income investments (including the Retirement Funds Bond Pool or RFBP); and
 - ▶ Miscellaneous investments (including Montana mortgages and equity real estate).

⁴⁶ *Annual Report: Fiscal Year 2007*, Montana Board Of Investments, Appendix A, p. A-17.

⁴⁷ Author's calculation from data provided in *Annual Report: Fiscal Year 2007*, Montana Board Of Investments, Appendix A, p. A-17.

The annual report published by the BOI contains a wealth of data and description. The following narrative is taken almost verbatim from the BOI's 2007 annual report and provides a snapshot of the state's investments, including retirement plan assets.

The Montana Domestic Equity Pool (MDEP) comprised 26% of the Total Portfolio on June 30, 2007. Pool securities include actively-managed small-, mid-, and large-cap domestic stock and passively-managed mid- and large-cap domestic stock. As of June 30, 2007, twenty five percent of the pool was managed by Board staff. The remainder was externally managed. The nine pension funds comprise 99.9 percent of the pool's Net Asset Value. Dividends are distributed monthly and capital gains/losses are retained in the pool.

The Retirement Funds Bond Pool (RFBP), comprising 15% of the Total Portfolio on June 30, 2007, is limited to pension funds only and all nine funds participate. Pool securities are a mix of longer-term investment grade corporate bonds and U.S. government bonds. All bonds are U.S. dollar denominated and the pool is managed by Board staff. Income is distributed monthly and capital gains/losses are distributed periodically.

The Short Term Investment Pool (STIP) comprised 21% the Total Portfolio on June 30, 2007. The pool operates as a money market fund with a constant share value of \$1.00. There were 479 participants in the pool in 2007, including 193 local governments. Pool securities consist of investment grade short-term securities. The pool is managed by Board staff and income is distributed monthly.

The Trust Funds Bond Pool (TFBP) accounted for 10% of the Total Portfolio on June 30, 2007. The 26 participants in this pool are a mix of trust funds and university funds that may be invested long term. The pool securities are similar to RFBP securities and the pool is managed by Board staff. Income is distributed monthly and capital gains/losses are distributed periodically.

The Montana International Equity Pool (MTIP), comprising 12% of the Total Portfolio on June 30, is limited to pension funds only and all nine funds participate. Pool securities consist of both actively-managed and passively-managed Europe and Pacific Basin equity securities. The pool is managed by contracted external managers. Dividends are distributed monthly and capital gains/losses are retained in the pool.

The Montana Private Equity Pool (MPEP), comprising 5% of the Total Portfolio on June 30, 2007, is also limited to pension funds only and all nine funds participate. The Board contracts with several private equity managers to invest in venture capital, leveraged buy-out, and other types of private equity investments. Income is distributed periodically and capital gains/losses are retained in the pool.

Details on investment holdings and earnings are available in PERB and TRS annual reports and in the BOI's annual reports. For PERS, the BOI reported a 2007 investment return of 17.95% compared to the 20.6% return on the S&P 500 Index.⁴⁸ Importantly, the 17.95% is not the "realized" rate of return, but it does reflect how the value of investment holdings has grown compared to a broad, widely watched, market index.

Implications of Investment Returns and Assumptions

After looking through the investment data and actuarial data on contributions and expenses, a common question is: What does this all mean?

Understanding a few key concepts may help:

(1) The "realized gain" is the actual gain from interest and other income, plus the gain (or loss) from the sale of equity or debt. Thus, the annual gain in the book or market value of the assets is less important than the long-term gains.

(2) The value of a plan's assets should cover the "normal costs" as benefits accrue and should pay off any past service liabilities that were not previously funded as the benefits were being earned. Otherwise, the system will eventually become actuarially unsound and require either a cash infusion or an increase in contributions, or both.

(3) The realized investment return on any given day is not as relevant to plan funding as are some other factors and assumptions. For example, the "spread" between the assumed returns on investments and the assumptions about salary inflation can have considerable effects on system soundness if actual experience differs significantly from assumptions. The concepts are discussed in greater detail below.

⁴⁸ *Op. cit.*, p. 5. The figures are for the fiscal year ending June 30, 2007, the most recent period for which figures are available at this writing.

Realized gains versus market gain: When assessing investments and investment return, a key concept to keep in mind is that "realized return" is not the same as the market value of investment holdings or a market gain. Realized return is the net gain (or loss) to system assets when an investment holding is sold. The amount realized depends on what the system paid to acquire the holding (the "book value" of the holding) and what the holding sold for at the time of sale in the market. To keep market swings from upsetting long-term projections about investment yield, actuaries typically value market returns by smoothing realized gains and losses over several years. The smoothing period is 4 years for the PERB-managed systems.

Covering both funded and unfunded liabilities: A DB plan's total liabilities consist of both funded and unfunded liabilities. The "unfunded" portion of a system's liabilities is the portion of the total actuarial liabilities that cannot be covered by the total actuarial value of assets on the day of the valuation. To make up the difference, asset growth (contributions and the projected investment return on those contributions) must ultimately be sufficient to pay for both the normal cost of benefits as they are being earned and the cost of the benefits that were not funded as they were being earned or at the time granted (in the case of *ad hoc* benefit increases to existing retirees). A properly funded DB plan has sufficient contributions and earnings so that normal costs are covered and there are enough contributions left over to make payments on the unfunded liabilities sufficient to pay off the liability within the amortization period.

Economic spread: Another important concept is that investment performance and the value of assets must be considered in context with the system's inherent economic assumption about the spread between investment return and salary inflation. This "economic spread", which is the difference between the annualized investment return assumption and the salary inflation assumption, becomes a key factor in assessing a retirement system's actual health.

For example, the assumed *general* growth rate of salaries for PERS is 4.25% per annum,⁴⁹ while the smoothed investment return assumption is 8%. Thus, the economic spread between the salary and investment-return assumptions is 3.75%. If the actual "spread" experienced by the plan exceeds the assumed spread of 3.75%, the system will have actuarial gains. If actual experience results in a smoothed investment return and actual salary inflation difference that is below 3.75%, the system will experience actuarial losses. Actuarial gains and losses do not affect actual plan assets, but affect only the amount of the unfunded liability and the projected schedule for amortizing the unfunded liability. Consequently, the amortization period is sometimes referred to as a "shock absorber". Through the 1990s, Montana's PERS had historically amortized unfunded liabilities faster than the projected amortization schedule because the system's actual gains exceeded the actuarially assumed gains.

The 2006 Wisconsin report showed that in 2006, about 30% (22) of states' systems presume an economic spread of 3.5% or less and 62% (45) of states' systems estimate the spread at more than 4%⁵⁰. Thus, Montana's assumed economic spread for the PERS/DB plan at 3.75% is part of the 10% of systems that occupy the middle of the range.

The retirement boards, supported by actuaries and investment managers, are responsible for ensuring that the retirement plans remain healthy. Based on the above discussion, the assumed 8% annual investment return being used may seem overly optimistic given recent market performance, but is within the norm of other similar plans. As of June 2008, contributions to all but one of Montana's DB plans are sufficient to cover both normal costs and pay off unfunded liabilities in less than 30 years, making the systems actuarially sound under the statutory definition—IF all other assumptions are realized.

⁴⁹ The PERB also assumes that PERS employees will earn salary increases for "merit", which are in addition to the general salary increases. The assumed average increase for merit over an employee's career is about 2% annually, but ranges from 6% for the first year of employment, 4.9% for the second, 3.9% for the third, and so on, until it reaches an average of 0.2% for years 11 through 20 and 0.0% for all years in excess of 20 years. See [PERS] Board Policy - Actuarial Assumptions and Methods - Valuations, Board Approved 2/14/2008.

⁵⁰ 2006 Comparative Study of Major Public Employee Retirement Systems, by William Ford, Wisconsin Legislative Council, Dec. 2007, pp. 35-36. Only 72 of the 85 systems reported information from which the economic spread could be determined.

Finally, the economic spread in PERS is moderately conservative compared to other states' plans and, although not true recently, has historically been lower than actual experience, resulting in actuarial gains more often than losses. If that difference can be reestablished, the plan's unfunded liabilities can be amortized sooner than projected.

Investments and DC Plans

As has been noted previously in this guide, a DC plan provides to a plan member upon retirement a lump-sum benefit that is based on total accumulated contributions and investment performance. Thus, a participant's contribution amounts, the investment choices made by the participant, and the timing of the participant's retirement ultimately determine the benefit paid.

The ORP and PERS/DC: The ORP and the PERS/DC plans are both DC plans set up under section 401(a) of the IRC. Specific provisions of 401(a) plans differ according to state law and administrative policy, but they all have to conform to federal requirements.

The ORP is managed by TIAA-CREF⁵¹ as guided by policy established by the Board of Regents. TIAA-CREF is a nationwide retirement system established primarily for people who work in higher education institutions and is among the largest retirement system administrators in the world. The ORP offers to each participant a menu of investment options within six different asset categories, where each category contains several different fund types.

The PERS/DC plan is managed by Great West Retirement Services (Great West), as guided by policy established by the PERB. The PERS/DC plan offers to each participant a menu of investment options within basically two different asset categories, equities and bonds. The equities category contains several different fund types, while the bond category contains a

⁵¹ TIAA-CREF stands for the Teachers Insurance and Annuity Association-College Retirement Equities Fund. According to its website, "TIAA-CREF is a Fortune 100 financial services company that is the leading retirement system for people who work in the academic, research, medical and cultural fields. With over \$435 billion in combined assets under management (12/31/07), TIAA-CREF serves 3.4 million active and retired employees of more than 15,000 institutions.

single fund. Also offered is a balanced fund composed of both equities and bonds.⁵²

Asset allocation: The allocation of assets, as discussed previously, is one of the factors that most affects the performance of an investment portfolio, whether for an entire plan (in the case of a DB plan) or for an individual member's account (in the case of a DC plan).

Within the ORP, it is each member's responsibility to allocate his or her account assets within six broad asset classes available to ORP members: equities; real estate; fixed income; money market; guaranteed; and multi-asset.

Within the PERS/DC plan, members' options are limited to two asset classes: equities and bonds.

ORP members have from one to several options within each of the asset classes, including:⁵³

- *within the **equity class**:*
 - CREF Equity Index Account
 - CREF Global Equities Account
 - CREF Growth Account
 - CREF Stock Account
 - TIAA-CREF International Equity Index Fund
 - TIAA-CREF Large-Cap Value Index Fund
 - TIAA-CREF Mid-Cap Growth Fund
 - TIAA-CREF Mid-Cap Value Fund
 - TIAA-CREF Small-Cap Blend Index Fund
- *within the **real estate class**:*
 - TIAA Real Estate Account
- *within the **fixed income class**:*
 - CREF Bond Market Account
 - CREF Inflation-Linked Bond Account
- *within the **money market class**:*

⁵² From *Defined Contribution Retirement Plan Basics*, Montana Public Employees' Retirement Administration, September 2007, on the MPERA website; URL <http://mpera.mt.gov/docs/DCBasics.pdf>.

⁵³ From *Montana University System and TIAA-CREF*, at URL <http://enroll.tiaa-cref.org/montana/>.

- ▶ CREF Money Market Account
- *within the **guaranteed class**:*
 - ▶ TIAA Traditional Account. This account guarantees the member's principal and a minimum interest rate, subject to the claims-paying ability of the insurer.
- *within the **multi-asset class**:*
 - ▶ any of several "lifecycle funds", including: TIAA-CREF Lifecycle Fund 2010; TIAA-CREF Lifecycle Fund 2015; TIAA-CREF Lifecycle Fund 2020; TIAA-CREF Lifecycle Fund 2025; TIAA-CREF Lifecycle Fund 2030; TIAA-CREF Lifecycle Fund 2035; TIAA-CREF Lifecycle Fund 2040
 - ▶ CREF Social Choice Account
 - ▶ three "model portfolios": Montana University System Faculty Plan; Montana University System Staff Plan; Montana University System TDA Plan. Each of the models offers five different combinations to accommodate investors with different investment goals and variable risk tolerances. The combinations include: conservative; moderately conservative; moderate; moderately aggressive; and aggressive.

Members of the PERS/DC plan have a less diverse menu of asset classes and fewer options within the classes, including:⁵⁴

- *within the **equity class**:*
 - ▶ "large cap" mutual funds in four categories: core; value; blend; growth
 - ▶ "mid cap" mutual funds in two categories: value; growth
 - ▶ "small cap" mutual funds in three categories: value; blend; growth
 - ▶ "world stock" mutual funds in three categories: global; international; EAFE Index⁵⁵
- *within the **bond class**:*
 - ▶ a bond index mutual fund; and

⁵⁴ *Defined Contribution Retirement Plan Basics*, Montana Public Employees' Retirement Administration, September 2007, on the MPERA website; URL <http://mpera.mt.gov/docs/DCBasics.pdf>.

⁵⁵ EAFE is an acronym for Europe, Australia, and Far East.

- *within the "other" class:*
 - ▶ a balanced mutual fund. This fund is composed of both bonds and equities.
 - ▶ a stable value/fixed fund. The stable value/fixed fund guarantees both principal and a rate of return.

Education and risk: In the course of discussions about the relative advantages and disadvantages of DB and DC plans, the financial education and investment savvy of individual plan participants becomes a particular concern. While participants in a DC plan unquestionably have more control over investment decisions, particularly asset allocation, DC plan participants also bear the risks associated with their individual decisions. If a participant's investment choices are too conservative, too aggressive, or in other respects unwise, the member's annuity in retirement may not be adequate, either in monthly benefits or for the duration of the retiree's life (and declining assets), to meet the participant's needs.

Defined contribution plan participants must become educated in various aspects of retirement theories and planning if they are to be expected to invest their retirement fund assets prudently. To that end, MPERA periodically offers educational opportunities for new PERS members and for all PERS/DC members.

Portability: Portability is another issue raised in discussions about DC plans and investments. However, whether contributions or benefits are portable depends on one's definition of "portability". In the case of the ORP, the degree of portability offered depends on the contract between TIAA-CREF and the Board of Regents. Currently, when an ORP participant terminates university employment, the participant's DC plan is generally portable; i.e., transferable to another qualified plan without penalty. However, even within TIAA-CREF, differences in contract provisions and employer policies mean that an employee's account may not necessarily be transferable.

Legislative Sessions and Fiscal Notes

Retirement legislation is often hotly debated during legislative sessions. Legislators during the session rely heavily on the fiscal notes that accompany retirement bills. The Governor's Office of Budget and Program Planning

(OBPP), assisted by retirement system staff, prepares the final fiscal notes for all retirement legislation that has fiscal implications. Each fiscal note is required to show anticipated costs over the next biennium. However, the financial obligations incurred when retirement legislation is passed will be ongoing; i.e., as long as benefits are to be paid, which can extend for the life of a retired member and to that member's beneficiary.

In an effort to provide legislators and others with information necessary to make an informed assessment or, perhaps, to vote, the OBPP has developed a specialized format for fiscal notes prepared on retirement system-related legislation. Among the key information that legislators should look for in a fiscal note is:

1. How does the legislation affect the normal cost of benefits?
2. How does the legislation affect the system's unfunded liabilities?
3. How does the legislation affect contribution rates?
4. How does the legislation affect the amortization period?
5. How does the legislation affect the funded ratio?

Whenever retirement legislation with a fiscal impact is passed and the future of the affected retirement system is changed, an actuarial calculation is required in order to project the long-term costs. Thus, when legislators seek to amend retirement legislation, new fiscal information can be made available only after the system's actuary has run the numbers. This may result in legislative action on retirement bills being delayed or, somewhat more disconcerting, being taken before the financial implications are known. Either way, information provided in a well prepared fiscal note is necessary to understanding the effects of the legislation and to making an informed decision.

Other information that legislators may consider pertinent is the potential effect, if any, that proposed changes in one retirement system may have on other systems. For example, if an enhanced benefit proposed for TRS participants is a good idea, is the idea also good for PERS members? Experience suggests that such consideration is especially important whenever considering changes, especially benefit enhancements, to any of the public safety employees' systems.

Summary

Assessing a DB plan's financial health is a complex affair. Even when a system is deemed to be actuarially sound, it is important to know the underlying assumptions and to understand how the assumptions interact. Understanding the concepts involved in actuarial valuations, how various investments and asset classes are performing, and how well actuarial liabilities are funded by actuarial assets all helps to illuminate what may seem to be the rocket science behind how or how well a DB plan is funded.

Actuarial calculations are required to produce reasonably reliable assessment of a plan's actuarial soundness. The individual and composite amounts and percentages produced by the actuarial valuation may be an indicator of relative financial health, but no single data point, measure, or statistic is an absolute measure of a system's strength or weakness.

A sound DB plan provides a predictable benefit for employees and subjects the employer to historically manageable investment risk.

Although Montana's public DB plans are prudently insulated from fluctuations in financial markets, they provide plan members with little control over how individual members' funds are managed. Employer costs can fluctuate in a DB plan and, at a given point in time, can only be estimated through actuarial projections.

In contrast, the employer's costs to fund a DC plan are known.

The sufficiency of a DC-plan benefit will depend on how wisely the employee has invested, how well the plan's offered menu of accounts meets the individual's retirement goals and risk tolerance, and the state of the financial markets when the employee retires. In a sense, participants in a DC plan become their own long-term investment advisers, trading the relative comfort of perhaps moderate but predictable defined benefits in retirement for the opportunity to generate outsized investment returns and the potentially higher benefits such returns could provide during retirement. However, when DC plan participants accept the opportunity for the higher rewards, they also accept the risk of imprudent investing and the fluctuations in financial markets at different points in time.

CHAPTER 6

PUBLIC EMPLOYEE RETIREMENT ISSUES AND THE DEBATE OVER CONVERTING

Legislative policy issues will continue to include issues relevant to Montana's public employee retirement plans. In particular, the potential for and advisability of converting public DB plans to DC plans will likely continue to be debated among public policymakers. This chapter addresses some of the key issues that are raised in most legislative debates on Montana's public retirement systems and some key issues related to moving from a DB plan to a DC plan.

Defined Benefit Plan Issues

Creating past-service liability: Additional liability for past service is created whenever a benefit is enhanced and the enhanced benefit applies to years of service already performed (as well as to service yet to be performed). The liability occurs because the contribution rates for past service were set based on the projected costs of benefits accruing at that time which benefits did not include the enhancement. A benefit enhancement increases the normal cost of the system. If it is applied to service that was performed in the past that was subject to lower contributions rates, a liability is created that was not included in previous cost estimates or contribution rates.⁵⁶

One way to prevent liability for past service is to make a benefit enhancement applicable only to new service or to new members. However, this creates a two-tiered benefit structure and results in unequal treatment of members within the same retirement system. Because equitable treatment of members, especially those within each system, has been at least a tacit policy of the Legislature, past legislatures have typically applied benefit enhancements to past service as well as current and future service.

About the only other way to prevent unfunded liability from accruing from enhanced benefits for past service is to pay off the liability immediately with a

⁵⁶ A good, recent example of a benefit enhancement that applied to past service but for which past contribution rates were not actuarially sufficient to cover the normal cost of the benefit was the increase in 2001 of the GABA from 1.5% to 3% annually for PERS/DB members and retirees. See Ch. 149, L. 2001.)

cash infusion sufficient to cover the cost of the benefit for all of the service previously provided.

The ratchet effect: Another policy issue involves what is termed the "ratchet effect". Just as a ratchet can be tightened but not loosened, the law requires that once a retirement benefit is promised to members, it cannot be withdrawn from or reduced for those members. If a benefit is given but is later determined to be too costly or unwarranted, the only remedies available are to pay for it going forward by increasing contributions or through a direct deposit of funds, or by legislatively enacting a reduced benefit for employees new to the system at a future date.

Although past legislatures have resorted to reducing benefits of future employees, equity and fairness issues have led subsequent legislatures to reinstate the higher benefits for all employees. Reinstating benefits increases unfunded liabilities for past service and, most likely, for the overall costs of the benefit beyond what the costs would have been if the benefit had never been reduced.

Benefits can be exchanged for other benefits of equal or greater value:

Benefit-for-benefit "swaps" can sometimes be designed and are legal, provided the new benefit is of equal or greater value than the old benefit. Such swaps were used to help fund a portion of the costs of the 1.5% GABA granted to certain PERB-governed plans' members by the Legislature in 1997.⁵⁷

The leapfrog effect: Another policy issue arises when a jurisdiction has created several separate retirement systems. Members of one system may lobby the Legislature for a benefit enhancement one session, and if the Legislature grants the enhancement, members of another system may lobby for a similar or better benefit during the next session.

Granting benefit enhancements by allowing the retirement systems or plans to play leapfrog with each other can lead to inconsistent and inequitable

⁵⁷ Ch. 287, L. 1997. The Statement of Intent attached to the legislation (HB 170) read, in part, "the bill provides that the GABA be substituted for other benefits in cases in which the GABA is as valuable or more valuable to members. The resulting actuarial savings will reduce the additional funding required for the GABA."

retirement policy as well as additional costs and unfunded liabilities. To help prevent leapfrogging, legislators may want to ask proponents of benefits enhancements the question: "If the proposed benefit enhancement is appropriate for members of this system, is it appropriate and should it be granted for members of other systems?"

Funding benefit enhancements: A legislator who is asked to support a benefit enhancement may also be asked to support one of the following funding mechanisms:

- *Increase contributions to sufficiently fund the enhancement:* Contributions should be sufficient to fund both the normal cost of the enhancement and to amortize in 30 years or less any unfunded past service liability. Raising employer contributions in a retirement system places an additional burden on the employer's budgets. Furthermore, where local governments are the employers, increasing employer contributions may be considered an unfunded mandate.
- *Extend the amortization schedule:* If contributions are not raised enough to cover costs of enhancing benefits, the system's unfunded liability will compound. A system's liabilities may be "refinanced" by extending the amortization schedule. In many ways, the amortization period becomes a system's "shock absorber". Policymakers asked to extend the amortization period should consider sound policy principles to determine how far the amortization period can be extended before the system is no longer responsibly funded.⁵⁸
- *Apply the enhancement to new service only:* Applying an enhancement to future service only will help control costs because no debt for past service is created. (Sound retirement policy requires concurrent funding of benefits, so increased contributions or a one-time cash infusion is assumed.) However, this future-application-only option results in a tiered system in which members of the same plan will receive different benefits (thus abrogating the "equal treatment" principle).

⁵⁸ As previously noted, the MCA defines "actuarially sound basis" as requiring amortization of unfunded liabilities in 30 years or less. Section 19-2-409, MCA.

Legislators are under a heavy burden to make informed and carefully considered decisions on retirement legislation. A "mistake" can rarely be fixed without enacting new provisions.

Converting from a DB to a DC Plan

An impetus for change: The period from about 1982 through 2000 comprised what may have been the strongest, longer-term bull market in the history of the U.S. stock markets. The Dow Jones Industrial Average index rose from 875 in January 1982 to over 11,700 in January 2000, some 1,300%, at a compounded annual rate of just under 15.4%.⁵⁹ During the same period, annual consumer price inflation declined from 10.35%⁶⁰ to 3.4% and the prime interest rate fell from a peak of 21.5% (December 1980) to 8.75% (February 2000).

Having witnessed the changes in fortunes of the financial markets and, especially, stockholders through the mid-1990s, some legislators and some public employees expressed interest in exploring converting the PERS/DB plan to a DC plan.⁶¹ During the 1995-96 legislative interim, the CPERS contracted for a study of and report on the PERS and DB/DC conversion issues. As a follow-up to the report, CPERS requested and the 55th Legislature passed HB 90,⁶² directing a legislative committee to design a new or modified PERS to provide for greater plan flexibility, greater benefit portability, and more employee control and responsibility.

House Bill No. 79: The 1997-98 CPERS worked long and hard with committee staff, the PERB and MPERA staff, and a team of consultants to craft what ultimately became House Bill No. 79. Passed by the 56th Legislature (1999), HB 79⁶³ created a new defined contribution plan within PERS and allowed all then-current and future PERS members to individually

⁵⁹ DJI Average index figures from Yahoo Finance; calculations by author.

⁶⁰ 10.35% was the inflation rate for 1981, just prior to the start of the 1982-1991 bull market.

⁶¹ The Montana University System, through the Board of Regents, had implemented a DC plan, the Optional Retirement Program (ORP), in 1989 and converted fully to the ORP for faculty and administrators in 1993. See Title 19, ch. 21, MCA; enacted by Ch. 494, L. 1987.

⁶² Ch. 191, L. 1997.

⁶³ Ch. 471, L. 1999.

elect to join the PERS/DC plan or stay in or join the PERS/DB plan. The PERB, through the MPERA, implemented the PERS/DC plan July 1, 2002.

PERS/DC opens for business: When the Legislature created the DC plan in 1999 and required implementation by July 1, 2002, neither the legislators nor other advocates of the plan could have foreseen the external challenges confronting the start up and success of the DC plan. The raging bull market of the 1990s, the so-called "dot.com" bubble, had burst in early 2000, sending the U.S. stock market averages down substantially over the next 20 months.⁶⁴ Then, just as it appeared that the markets were beginning to bottom out, the terrorist attacks of September 11, 2001, kept them from rebounding for another year or two.

The DJIA didn't exceed its peak reached in 2000 until September 2006, the S&P 500 took a bit longer; i.e., until July 2007, and the NASDAQ still hasn't recovered, remaining down more than 45% from its March 2000 high to its recent (October 2007) post-bubble high. Moreover, all three indices are, in October 2008, down substantially from their post-bubble highs.

Perhaps as a result of market volatility and especially market declines, the PERS/DC plan has not attracted strong participation from among PERS-eligible employees. More than 6 years after implementation, only 1,769 of 30,062 active PERS members, less than 6% of all active PERS members, participate in the DC plan.⁶⁵ However, the DC system has experienced somewhat higher participation rates among new hires as about 9% joined the DC plan in FY 2005 and 10% joined in FY 2006.⁶⁶

As others see it: A report to the Texas House of Representatives Committee on Pensions and Investments in 2000 included a table comparing certain

⁶⁴ In mid-January 2000, the DJIA peaked at 11,723 and bottomed at 8,235 in September 2001, a 30% drop. The Standard and Poor 500 peaked at 1,527 in March 2000 and hit bottom in September 2001 at 966, a 37% decline. Hardest hit was the NASDAQ, which peaked at 5,048 in March 2000 but then declined precipitously to 1,423 by September 2001, more than a 70% loss.

⁶⁵ The numbers do not reflect PERS/DB or DC retirees. It should be noted that the DB plan has existed for 60 years and is a mature plan while the DC plan has been in place for only 6 years.

⁶⁶ "Defined Contribution Experience in the Public Sector", by Mark C. Olleman, in *Benefits and Compensation Digest* on line at www.ifebp.org, Feb. 2007.

aspects of generic DB and DC plans.⁶⁷ The table appears below largely intact, but contains a few revisions in the wording or to reflect known changes since 2000.

| Features of Defined Benefit and Defined Contribution Plans | | |
|---|---|---|
| Element | Defined Benefit Plans | Defined Contributions Plans |
| Benefit Design | Benefits are determined by a formula and benefit levels are guaranteed. | Benefits are determined by the contributions and investment earnings in a person's account. |
| Contributions | Members' contributions are set; sponsors are responsible for contributing as much as necessary to provide the promised benefits | Members' and sponsors' contributions are set. |
| Employee Salary Changes | Salary increases affect both past and future benefits because the benefit is determined by final average salary. | Salary changes affect future contributions. |
| Cost of Living Adjustments (COLAs) | Two-thirds of public plans provide automatic COLAs. In other public plans, there is no guaranteed protection from inflation. | Public plan provisions usually do not but can provide for annuities that offer an adjustment for inflation. |
| Benefit Adequacy | Depends on plan provisions. | Depends on investment returns, contributions, timing of retirement, and other factors. |
| Investment Risk | The employer bears the risk. Regardless of investment performance, employer pays specified lifetime benefit. | The employee bears the investment risk. The employer's responsibility is to make the scheduled contributions. |
| Investment Results | Investment performance affects funding, but does not directly affect benefits. Strong investment performance can lead to enhanced benefits or, rarely, reduced contributions. | Investment performance will help determine the employee's retirement benefit. |
| Longevity | Benefit levels are guaranteed for a retiree's lifetime. Retirees are often given the option of providing survivor benefits. | Benefits consist of the account balance, which can be annuitized for lifetime income, sometimes with survivor benefits. |
| Portability | Limited | Substantial flexibility |
| Individual Control | Members have no individual control of benefit levels, but affect them collectively through political action. | Members have individual choices among investments and in some plans have choices among contribution amounts. |
| Simplicity | Members can be confused by the relationship of salary and retirement benefits. | Contribution structure is easily understandable. Investment decisions can be daunting. |

⁶⁷ Committee on Pensions and Investments, Texas House of Representatives, "A Report to the House of Representatives", 77th Texas Legislature: Defined Contribution/Defined Benefit (Austin, Texas: 2000) as cited in *Defined Benefit and Defined Contribution Retirement Plans*, NCSL, February 2005; found at URL <http://www.ncsl.org/programs/fiscal/defineretire.htm>.

Other States

Montana is not the only state to have offered a DC retirement plan. Alaska, Michigan, Nebraska, and the District of Columbia each designate a DC plan as the default mandatory retirement plan for their public employees (or in some cases, the only plan) and West Virginia had a mandatory DC retirement plan for teachers until July 1, 2005.⁶⁸ Five other states have, in recent years, created defined contribution plans as the primary coverage for elected officials and political appointees, sometimes including legislative staff. The states include Colorado, Louisiana, Nevada, Vermont and Virginia.⁶⁹ To some degree these plans are a response to term limits for legislators and other elected officials.

Some other states have "hybrid" plans in which there are elements of both DB and DC plans. States in this group include Florida, Indiana, Ohio, Oregon, and Washington. Because Montana's PERS/DB plan has a money purchase (defined contribution) feature, it is technically a hybrid plan and Montana could be included in the states with hybrid plans.

All states are allowed under federal law⁷⁰ to establish "deferred compensation" plans that are supplemental to public employees' DB or DC retirement plans. Employee participation in deferred compensation plans offered by states is voluntary.

Summary

Public employees are typically required to participate in one of three types of retirement plans: defined benefit; defined contribution; or hybrid. There are certain advantages and disadvantages associated with each plan type.

⁶⁸ From *Defined Benefit and Defined Contribution Retirement Plans*, NCSL, February 2005; found at URL <http://www.ncsl.org/programs/fiscal/defineretire.htm>. NOTE: The NCSL document was written prior to the WV teachers' DC plan closing to new members (July 1, 2005). Teachers in WV hired after June 30, 2005, are required to become members of the WV Teachers' Retirement System. Source: "TRS Frequently Asked Questions", West Virginia Consolidated Public Retirement Board, URL <http://www.wvretirement.com/Questions%20TRS.html>.

⁶⁹ *Ibid.* NOTE: Alaska is not cited in the NCSL paper because the paper was prepared in February 2005 and Alaska converted to a mandatory DC plan later that year.

⁷⁰ Section 457, Internal Revenue Code.

About 90% of all public employees participate in defined benefit retirement plans.⁷¹ History suggests that employees and retirees consistently advocate for enhanced benefits. Benefit enhancements are sometimes granted due to the ratchet effect and the leapfrogging that occurs between different retirement systems. Policymakers are well-advised to adhere to sound retirement principles whenever considering retirement benefit enhancements.

Defined contribution retirement plans are less common among public sector plans than either defined benefit plans in the public sector or defined contribution plans in the private sector. A public employee who participates in a DC plan trades the predictability of a defined retirement benefit for control over the investment of his or her retirement assets and accepts an unpredictable but potentially higher retirement benefit. Defined contribution plan participants assume all of the financial and investment risks associated with retirement planning. Consequently, educating DC-plan participants about investing for retirement is critical if employees' retirement goals are to be achieved by anything other than sheer luck.

⁷¹ *Governing.com*, "Now, Can I Ever Afford to Retire?", by Gerard Miller, October 2008. On line at URL <http://www.governing.com/articles/0810gmillerb.htm>

CHAPTER 7

POLICY PRINCIPLES

Need for Policy Principles

As mentioned in the introduction, the Montana Legislature has recognized a need for sound and consistent retirement policy. This chapter provides the history and status of some basic, retirement policy principles.

Retirement Principles Advocated by the National Conference of State Legislatures

In 1995, the Public Pension Working Group of the National Conference of State Legislatures (NCSL) adopted and recommended to state legislatures four principles for sound and consistent retirement policy.⁷²

1. *Pensions should provide financial security in retirement.*

Retirement should be defined as the completion of a working career, not the end of employment under a system. Financial security should be viewed in terms of the minimum benefit required for a retiree to enjoy reasonable financial security in his or her later years. The benefit is to some extent deferred compensation for the retiree's years of public service.

2. *Pension funding should be a contemporary obligation.*

Retirement benefits should be paid for at the time the service is being performed, not by future taxpayers or contributors.

3. *Pension investments should be governed by the "prudent expert rule".*

Investments should be carried out according to accepted standards that emphasize prudence, discretion, and intelligence and that discourage speculation. Prudent investments protect capital and maximize earnings.

⁷² National Conference of State Legislatures, *Public Pensions: A Legislator's Guide*, NCSL Working Group on Pensions, 1995.

4. *Pension benefits should be equitably allocated among beneficiaries.*

This principle is aimed at preventing discrimination against any group of employees based on occupation, marital status, tenure, salary, hire date, etc. This principle is designed to prevent discrimination between retirement systems and among members of the same system.

The CPERS initially adopted a version of NCSL's recommended retirement principles in 1997 and attempted to apply them to retirement-system related legislation proposals considered by the committee, by the standing committees that considered retirement-system related bills, and by the respective houses of the legislature.⁷³ Since the principles were first adopted, they have survived several iterations, the latest by the SAVA, in April 2008. As adopted by the SAVA pursuant to section 5-5-228, MCA, the principles applicable to retirement system-related proposals and legislation are as follows:⁷⁴

- I. Pensions should provide the base of financial security in retirement.
- II. Pension funding should be a contemporary obligation.
- III. Pension investments should be governed by the Prudent Expert Rule.
- IV. Pension benefits should be equitably allocated among beneficiaries.

The 24 "guidelines" that accompany and supplement the four principles are included in Appendix A.

Adequacy of benefits

A comparison of NCSL's principles and the principles adopted by the SAVA show that the second, third, and fourth principles are the same. However, the SAVA modified the first principle to reflect the members' philosophy that a

⁷³ *Legislative policy objectives for Montana's Public Employee Retirement Systems : 1999-2000 Interim*, by Sheri Heffelfinger, State Administration, Public Retirement Systems, and Veterans' Affairs Interim Committee, 1999-2000.

⁷⁴ *Principles and Guidelines for Public Employee retirement systems*, State Administration and Veterans' Affairs Interim Committee, Montana LSD, April 2008.

public employee's pension should provide the base for financial security in retirement rather the whole of financial security.

The distinction is important because Montana's defined benefit retirement plans are designed to replace about 50% of a retiree's pre-retirement wages (assuming full retirement benefits at normal retirement age). If the plans function as intended, a retiree's retirement benefit will replace about 50% of his or her pre-retirement wages. When that percentage of income is combined with income from Social Security and from personal savings and investments, the total should reach approximately 70-80% of the retiree's pre-retirement wages as advocated by various "retirement experts".⁷⁵

Legislators and others frequently inquire about the "average" retirement benefit of public employees—a legitimate curiosity. However, whatever "average" might be reported would have to explained in the context of:

- the number of years worked. A simple average retirement benefit would not reflect the variance in the number of years worked by different employee-retirees. The number of years worked is a significant variable in calculating the benefit for retirees in each of the nine DB plans.
- eligibility for full benefits. A public employee in Montana is eligible for full retirement benefits upon reaching the "normal retirement age" specified for the system to which the member belongs. That "age" could be after 15, 20, 25, or 30 years of service, depending on the retirement system to which the retiree belongs.
- years during which service was earned. The years during which a retiree worked can have a significant effect on the retirement benefit because the benefit is substantially based on the member's highest average salary. Because wages typically increase over time, a retiree with 30 years of service that were earned from 1965 to 1995 will be probably less than a retiree

⁷⁵ See: "Ultimate guide to retirement" at cnnmoney.com, October 2008; and "How Much Is Enough?", by Mary Beth Franklin, at kiplinger.com, at URL <http://www.kiplinger.com/magazine/archives/2006/02/retire.html>. The literature on retirement planning is filled with the opinions of different experts and authors regarding post-retirement income levels necessary to sustain a comfortable retirement. However, there is no single percentage of pre-retirement income that is universally recognized as the right number.

from the same job whose 30 years of service were earned from 1975 to 2005.

For the reasons noted above and others, citing any number or amount as an "average benefit" could be misleading without knowing and understanding what elements were considered in calculating the average.

Contemporary funding of benefits

It is ultimately reasonable to suggest that retirement benefits should be paid for as they are earned. By adhering to contemporary funding of benefits, the employee earning the future benefits is regularly contributing towards the full value of his or her retirement and the employer, i.e., the taxpayers, who benefits from the employee's services is contributing in parallel. When the costs of future benefits are paid for as they are being earned, they are not passed off to future employees or taxpayers in the form of unfunded liabilities or to future employees in the form of reduced pay or benefits.

The Prudent Expert Rule

The Montana Constitution requires that the investment of public retirement system assets "...be managed in a fiduciary capacity in the same manner that a prudent expert acting in a fiduciary capacity and familiar with the circumstances would use in the conduct of an enterprise of a similar character with similar aims."⁷⁶ Simply put, prudent investments protect capital and maximize earnings.

Equitable allocation of benefits

It may be that equity, like beauty, is in the eye of the beholder. However, policy makers should strive to ensure that the retirement benefits made available to one group of employees/retirees are made available to all other groups similarly situated. As important as the concept is when weighing benefits between different systems, it is even more important when examining the benefits available to members of the same system. The principle is aimed at preventing discrimination against any group of employees based on occupation, marital status, tenure, salary, hire date, etc.

⁷⁶ Art. VIII, sec. 13(3), Montana Constitution.

Equitably allocating benefits is also a defense against the ratchet effect and leapfrogging.

Summary

Sound principles underpinning retirement policy are useful to the extent that they help guide stakeholders and decision makers toward consistent and sound decisions and administration. Somewhat akin to constitutional provisions in the legal context, the "principles" are viewed as the foundation of financial, benefit, and administrative policies in the context of retirement systems. In the same vein, the "guidelines" function somewhat like statutory provisions, implementing the underlying principles.

To the extent policy makers establish and consistently follow sound retirement principles, they will help to ensure that retirement benefits are adequate and paid for as they are earned, that retirement systems are financially sound, and that similarly-situated retirees are treated equitably in terms of the retirement benefits they receive.

If policy makers do not follow sound principles, various problems can result. Retirees may not be able to sustain the standard of living that either they or their employers anticipated. A poorly designed or poorly functioning retirement system can have adverse effects on recruiting and retaining a qualified workforce. The costs of retirement benefits being earned by current employees for services provided to current taxpayers can be shifted to future employees and taxpayers. The retirement system can be structurally unsound, directly causing benefit reductions to future employees or cost-shifting to future employees and taxpayers or can have indirect effects, e.g., lower bond ratings, that increase the costs of providing government services. Allocating benefits in an inequitable manner can promote leapfrogging and the ratcheting up of benefits among different groups or systems, thereby increasing costs.

Simply put, multiple problems can be avoided if sound policy principles are established and followed.

APPENDIX A

Pursuant to 5-5-228, MCA, the State Administration and Veterans' Affairs Interim Committee has established the principles stated in statements 1 through 4 as sound fiscal and public policy in the context of public employee retirement systems.

Principles

1. Pensions should provide the base of financial security in retirement.
2. Pension funding should be a contemporary obligation.
3. Pension investments should be governed by the Prudent Expert Rule.
4. Pension benefits should be equitably allocated among beneficiaries.

Also pursuant to 5-5-228, MCA, the State Administration and Veterans' Affairs Interim Committee has established the guidelines stated in (A) through (X) to assist members of the 61st Legislature, public employees and other interested stakeholders, taxpayers, and the public whenever considering changing the law or policy of Montana in the context of public employee retirement systems.

Guidelines

- (A) The legislature should approve all changes of benefits.
- (B) The legislature should approve the funding of the state's retirement systems.
- (C) The legislature should regularly review the management of the state's public retirement systems and the investment of the systems' assets.
- (D) The legislature should maintain permanent, pension-review bodies to analyze the problems of the state's public retirement systems on an ongoing basis and to make recommendations for state legislative action.

- (E) The legislature should require contemporaneous funding of pension benefits to ensure that pension costs are not shifted to future taxpayers, including that any increase in pension benefits be accompanied by a corresponding and equal increase in employer and employee contributions.
- (F) The legislature should require a fiscal note when establishing or amending pension plan benefit provisions and the fiscal note should state whether the proposed revisions follow the principles and guidelines established under 5-5-228, MCA.
- (G) The legislature should ensure that the full, long-term costs of early retirement programs and incentives have been calculated before such a program is adopted in order to allow the legislature to provide for the costs.
- (H) The legislature should ensure that post-retirement benefit adjustments are independently funded and have a ceiling on the percentage of increase for a single year.
- (I) The legislature should provide strict guidelines for disability coverage and should provide for periodic, follow-up screenings of disabled retirees.
- (J) The legislature should make available but not pay for health insurance for retired employees. Health insurance is not a benefit available through the retirement systems administered by the Public Employees' Retirement Board or the Teachers' Retirement Board.
- (K) The legislature should establish strict fiduciary standards and conflict of interest laws to govern the conduct of trustees as they manage the assets of the retirement system.
- (L) The legislature should continue to require annual actuarial reports that use uniform actuarial assumptions to evaluate the financial soundness of the state's public retirement systems.
- (M) The legislature should provide for reciprocity of benefits for workers who shift jobs within the state and its political subdivisions and portability for those who shift jobs across state lines.
- (N) The legislature should ensure that pension plan participants are fully informed of plan provisions, including benefits, service and vesting requirements, assets and liabilities, investment performance and risk, actuarial assumptions and data, fiduciary requirements, and selection of plan trustees.

- (O) The legislature should support coordination of state and local retirement systems.
- (P) The legislature should encourage and support the efforts of state retirement system administrators to comply with the principles of pension system administration established by the Public Pension Coordinating Council.
- (Q) The legislature should not index postretirement benefit increases.
- (R) The legislature should provide for an annual increase in postretirement benefits.
- (S) The legislature should not enact one-time, *ad hoc* benefit increases.
- (T) The legislature should require that public employees belong to a retirement plan.
- (U) The legislature should continue to authorize local governments to enroll rural firefighters under the Firefighters' Unified Retirement System, provided the local government pays the cost.
- (V) The legislature should strive to ensure that retirement benefit formulas in the public safety retirement plans are similar.
- (W) The legislature should resist changes to retirement benefit formulas or retirement eligibility criteria that would encourage early retirement.
- (X) The legislature should encourage retirees who return to work to also return to active retirement plan membership.

GLOSSARY

"401(k) plan" or "401(k)": a defined contribution plan governed by section 401(k) of the IRC that is offered to employees and in which they may voluntarily participate on an individual basis. A 401(k) allows an employee to set aside tax-deferred income for retirement purposes. In some 401(k) plans, the employer will match an employee's contributions dollar-for-dollar.

"403(b) plan" or "403(b)": a retirement plan governed by section 403(b) of the IRC that is similar but not identical to a 401(k) plan and is offered by non-profit organizations, such as universities and some charitable organizations.

"457 plan" or "457": a tax-exempt deferred compensation program, governed by section 457 of the IRC, that is made available to employees of state and federal governments and agencies. A 457 plan is similar to a 401(k) plan, except there are never employer matching contributions and the IRS does not consider it a qualified retirement plan.

"Accrued benefit": a retirement, pension, or disability benefit that an employee has earned based on his or her years of service. Accrued benefits are often calculated in relation to the employee's salary and years of service.

"Accumulated contributions": the sum of all the regular and any additional contributions made by a member in a defined benefit plan, together with the regular interest on the contributions.

"Active member": a member who is a paid employee making the required contributions and is properly reported for the most current reporting period.

"Actuarial assumption": an estimate made for the purposes of calculating benefits. Possible variables include life expectancy, return on investments, interest rates, and compensation.

"Actuarial cost": the amount determined to represent the present value of the benefits to be derived from the additional service to be credited based on the most recent actuarial valuation for the system.

"Actuarial equivalent": a benefit of equal value when computed upon the basis of the mortality table and interest rate assumptions of the retirement plan. It reflects the condition in which two or more payment streams have the same present value based on the appropriate actuarial assumptions.

"Actuarial liabilities": the excess of the present value of all benefits payable under a defined benefit retirement plan over the present value of future normal costs in that retirement plan.

"Actuary": a highly trained professional of a special area of finance who deals with the financial impact of risk and uncertainty. Actuaries have a deep understanding of financial-security systems, their reasons for being, their complexity, their mathematics, and the way they work.

"Additional contributions": contributions made by a member of a defined benefit plan to purchase various types of optional service credit as allowed by the applicable retirement plan.

"After-tax contributions": contributions to a retirement plan that are subject to federal income tax prior to deposit in the plan. They are also called "voluntary contributions".

"Annuity": in the case of a defined benefit plan, equal and fixed payments for life that are the actuarial equivalent of a lump-sum payment under a retirement plan and as such are not benefits paid by a retirement plan and are not subject to periodic or one-time increases. In the case of the defined contribution plan, an annuity is a payment of a fixed sum of money at regular intervals, which may or may not be for life.

"Beneficiary": an individual, institution, trustee, or estate which receives, or may become eligible to receive, benefits under a will, insurance policy, retirement plan, annuity, trust, or other contract.

"Benefit" or "retirement benefit": (a) the service retirement benefit, early retirement benefit, or disability retirement or survivorship benefit payment provided by a defined benefit retirement plan; or (b) a payment or distribution under a defined contribution retirement plan for the exclusive benefit of a plan member or the member's beneficiary, or an annuity if one is purchased by the member.

"Book value": the value of an asset or liability which value might be higher or lower than the market value of the asset or liability. The book value reflects depreciation or appreciation accruing to the asset or liability. Contrast with "market value".

"Contribution": a payment to a retirement plan. The contribution can be made by an employee or an employer and may be either pre-tax or after tax.

"Contingent annuitant": a person designated to receive a continuing monthly benefit after the death of a retired member.

"Cost of Living Adjustment" or "COLA": annual increase in prior year's benefit amount, usually a percentage and based on national economic data, e.g., consumer price index; similar to "Guaranteed Annual Benefit Adjustment" or "GABA".

"Death benefit" or "survivorship benefit": a payment made to a beneficiary from a retirement plan, an annuity, or an insurance policy when the plan member, annuitant, or policyholder dies.

"Deferred compensation": an arrangement, subject to IRC conditions and requirements, in which a portion of an employee's income is paid out at a date after which that income is actually earned. The primary benefit of most deferred compensation is that any taxes due on the income is deferred until funds are withdrawn under the arrangement.

"Defined benefit retirement plan" or "defined benefit plan": a pension plan in which a retired employee is entitled to receive upon retirement a regular, periodic, specific amount based on the retiree's salary history and years of service.

"Defined contribution retirement plan" or "defined contribution plan": a retirement plan in which the employee is required to or elects to defer some amount of salary into an individual account over which the employee has limited control for investing the assets and limited options when making withdrawals at retirement.

"Direct rollover": a distribution from a qualified pension plan, 401(k) plan, 403(b) plan, etc., that is remitted directly to the trustee, custodian, or issuer of the receiving retirement plan or IRA and is reported to the IRS as a rollover.

"Disability" or "disabled": a total inability of the member to perform the member's duties by reason of physical or mental incapacity. The disability must be incurred while the member is an active member.

"Early retirement": a retirement plan provision that allows an employee to retire before the normal retirement age.

"Early retirement benefit": the retirement benefit payable to a member following early retirement and is the actuarial equivalent of the accrued portion of the member's service retirement benefit.

"Earned benefit": a benefit contingent on how long an employee has worked for an employer or been a member of a retirement plan

"Employee contribution": an individual's contribution to his or her own retirement plan, often tax-deferred.

"ERISA" or "Employee Retirement Income Security Act": the federal law enacted in 1974 that established legal guidelines for private pension plan administration and investment practices. Public retirement plans generally are not subject to ERISA.

"Final average compensation" or "FAC": with respect to the MPORS, the monthly compensation of a member averaged over the last 36 months of the member's service or, in the event a member has not served at least 36 months, the total compensation earned divided by the number of months of service.

"Firefighters' Unified Retirement System" or "FURS": the retirement system provided for in Title 19, chapter 11, MCA. The FURS is a defined benefit retirement

plan in which all full paid firefighters employed by the state or municipalities are members. Firefighters employed by the Montana Air National Guard may also be members.

"Guaranteed Annual Benefit Adjustment" or "GABA": annual increase in prior year's benefit amount, usually as a percentage of benefit; similar to "Cost of Living Adjustment" or "COLA"

"Game Warden and Peace Officers Retirement System" or "GWPORS": the retirement system provided for in Title 19, chapter 8, MCA. The GWPORS is a defined benefit retirement plan in which all Montana game wardens and selected other law enforcement-related employees are members.

"Highest average compensation": a member's highest average monthly compensation during any 36 consecutive months of membership service.

"Highway Patrol Officers Retirement System" or "HPORS": the retirement system provided for in Title 19, chapter 6, MCA. The HPORS is a defined benefit retirement plan in which all Montana Highway Patrol officers are members.

"Inactive member": a member who terminates service and does not retire or take a refund of the member's accumulated contributions.

"Individual retirement account" or "IRA": a tax-deferred retirement account for an individual that permits the individual to set aside money each year, with earnings tax-deferred until withdrawals begin. Also see "Roth IRA".

"Internal Revenue Code" or "IRC": Title 26 of the United States Code. It is also known as the "federal tax code".

"IRA rollover": a tax-free reinvestment of a distribution from a qualified retirement plan into an IRA or other qualified plan within a specific time frame, usually 60 days.

"Judges Retirement System" or "JRS": the retirement system provided for in Title 19, chapter 5, MCA. The JRS is a defined benefit retirement plan in which all District Court Judges, Supreme Court Justices, and the Chief Water Judge are members.

"Keogh plan" or "Keogh": a tax-deferred, qualified retirement plan for self-employed individuals and unincorporated businesses.

"Lump sum distribution": a single distribution all at once, rather than as a series of payments over time.

"Market value": the price at which an asset is trading and could presumably be purchased or sold.

"Member": a person: (a) who has accumulated contributions and service that are credited within a defined benefit retirement plan or who receives a retirement benefit

on account of the person's previous service credited in a retirement system; or (b) who has a retirement account in a defined contribution plan.

"Membership service" or "service": the periods of service that are used to determine eligibility for retirement or other benefits. The term is usually used in the context of years, months, etc.

"Money purchase pension plan" or "money purchase plan": a defined contribution plan in which the amount of contributions made annually is in proportion to that employee's wages and is mandatory every year.

"Montana Board of Investments" or "Board of Investments" or "BOI": the board established in section 2-15-1808, MCA, to carry out the constitutional requirement for a unified investment program for public funds and public retirement system assets. The terms are sometimes applied to the administrative structure and staff employed by the Board.

"Municipal Police Officers Retirement System" or "MPORS": the retirement system provided for in Title 19, chapter 9, MCA. The MPORS is a defined benefit retirement plan in which all police officers employed by participating municipalities are members. Some police officers are members of retirement systems for which the municipal employer, rather than the state, is the plan sponsor.

"Montana Public Employees' Retirement Administration" or "MPERA": the administrative structure and staff through which the PERB administers the retirement systems under its control.

"Montana University System" or "MUS": the university system governed by the Montana Board of Regents and administered under the direction of the Commissioner of Higher Education.

"Normal cost" or "future normal cost": an amount calculated under an actuarial cost method required to fund accruing benefits for members of a defined benefit retirement plan during any year in the future. Normal cost does not include any portion of the supplemental costs of a retirement plan.

"Normal retirement age": the age at which a member is eligible to immediately receive a retirement benefit based on the member's age, length of service, or both, as specified under the member's retirement system, without disability and without an actuarial or similar reduction in the benefit.

"OASDI" or "Old Age, Survivors, and Disability Insurance": the official name for Social Security.

"Office of Budget and Program Planning" or "OBPP": the administrative office within the office of the governor responsible for developing the executive branch's budget and allocating funds appropriated by the Legislature.

"Optional Retirement Program" or "ORP": the optional retirement program retirement plan sponsored by the Montana University System pursuant to Title 19, ch. 21, MCA.

"Pension" or "pension benefit": benefit payments for life derived from contributions to a retirement plan made from employer-controlled funds. Sometimes referred to as an "annuity", although an annuity is typically a life insurance product.

"Pension plan": a qualified retirement plan set up by a corporation, labor union, government, or other organization for its employees.

"Pension trust fund" or "pension fund": a fund established to hold the contributions, income, and assets of a retirement system or plan in a legally-recognized trust.

"Plan asset": an asset in a retirement plan that serves as an investment vehicle for participating employees. Plan assets are categorized within asset classes, are managed by an investment manager, and are chosen to maximize risk-adjusted returns for the purpose of maintaining actuarial soundness.

"Plan choice rate": the amount of the employer contribution as a percentage of payroll covered by the defined contribution plan members that is allocated to the public employees' retirement system's defined benefit plan to actuarially fund the unfunded liabilities and the normal cost rate changes in a defined benefit plan resulting from member selection of the defined contribution plan.

"Plan sponsor": the employer who sets up a pension or retirement plan for employees.

"Portability": the ability of an employee to retain benefits, such as in a pension plan or insurance coverage, when switching employers.

"Public Employees' Retirement Board" or "PERB": the governing entity for the public employee retirement systems and plans enumerated in Title 19, chapters 3, 5 through 9, and 13, MCA, basically, the: PERS/DB and PERS/DC plans; JRS; HPORS; SRS; GWPORS; MPORS; FURS; and VCFA.

"Public Employees' Retirement System" or "PERS": the public employees' retirement system provided for in Title 19, chapters 2 and 3, MCA. The PERS is composed of both a defined benefit plan and a defined contribution plan.

"Qualified retirement plan" or "qualified plan": a plan that meets the applicable requirements of the Internal Revenue Code and, if applicable, the Employee Retirement Income Security Act, and is thus eligible for favorable tax treatment.

"Regular contributions": contributions required from members, employers, or both under a retirement plan.

"Regular interest": interest at rates set from time to time by the governing board.

"Retirement", "retire", or "retired": the status of a member who has terminated from service and who has received and accepted a retirement benefit from a retirement plan.

"Retirement account": an individual account within a defined contribution retirement plan for the deposit of employer and member contributions and other assets for the exclusive benefit of the member or the member's beneficiary.

"Retirement benefit" or "benefit": (a) the service retirement benefit, early retirement benefit, or disability retirement or survivorship benefit payment provided by a defined benefit retirement plan; or (b) a payment or distribution under a defined contribution retirement plan for the exclusive benefit of a plan member or the member's beneficiary, or an annuity if one is purchased by the member.

"Retirement plan" or "plan" or "retirement system" or "system": either a defined benefit plan or a defined contribution plan.

"Roth IRA": a type of IRA, established under the Taxpayer Relief Act of 1997, which allows taxpayers, subject to certain income limits, to save for retirement while allowing the savings to grow tax-free. Taxes are paid on contributions, but withdrawals, subject to certain rules, are not taxed at all.

"SAVA": the State Administration and Veterans' Affairs Interim Committee provided for in section 5-5-228, MCA, and commissioned as the Legislature's liaison between session in matters relating to public retirement issues. The SAVA is the successor committee to the SAIC which is the acronym previously ascribed to the State Administration and Veterans' Affairs Interim Committee. The SAIC was the successor to the CPERS or Committee on Public Employee Retirement Systems.

"SEP Plan" or "SEP": a retirement program for self-employed people or owners of companies with fewer than 25 employees, allowing plan members to defer taxes on investments intended for retirement.

"Service": employment of an employee in a position covered by a retirement system and is usually used in context of years, months, etc.

"Service credit": the periods of time for which the required contributions have been made to a retirement plan and that are used to calculate retirement benefits or survivorship benefits under a defined benefit retirement plan.

"Service retirement benefit" or "normal retirement benefit": the retirement benefit that the member may receive at normal retirement age. Also known as "full benefit".

"Sheriffs' Retirement System" or "SRS": the retirement system provided for in Title 19, chapter 7, MCA. The SRS is a defined benefit retirement plan in which all

county sheriffs, sheriff deputies, and various other employees of sheriffs' offices are members.

"Social Security": the comprehensive federal program of benefits providing workers and their dependents with retirement income, disability income, and other payments.

"Superannuation plan" or "superannuation": a pension plan or a pension, somewhat archaic.

"Supplemental cost": an element of the total actuarial cost of a defined benefit retirement plan arising from benefits payable for service performed prior to the inception of the retirement plan or prior to the date of contribution rate increases, changes in actuarial assumptions, actuarial losses, or failure to fund or otherwise recognize normal cost accruals or interest on supplemental costs. These costs are included in the unfunded actuarial liabilities of the retirement plan.

"Survivorship benefit": payments for life to the statutory or designated beneficiary of a deceased member who died while in service under a defined benefit retirement plan. Also called "death benefit".

"Tax deferral" or "tax deferred": paying taxes in the future on income earned in the current period.

"Teachers' Retirement Board" or "TRB": the governing entity for the retirement system established in Title 19, chapters 21, MCA, i.e., the Teachers' Retirement System.

"Teachers' Retirement System" or "TRS": the retirement system provided for in Title 19, chapter 20, MCA. The TRS is a defined benefit retirement plan in which all K-12 public school teachers and administrators are members..

"Underfunded pension plan" or "underfunded": a pension plan whose liabilities exceed its assets. Also referred to as an "actuarially unsound plan" or the state of being "actuarially unsound".

"Unfunded actuarial liabilities" or "unfunded liabilities": the excess of a defined benefit retirement plan's actuarial liabilities at any given point in time over the value of its cash and investments on that same date. Also known by the acronyms "UAAL" and "UAL".

"Vested account": an individual account within a defined contribution plan that is for the exclusive benefit of a member or the member's beneficiary. A vested account includes all contributions and the income on all contributions in the member's contribution account, the vested portion of the employer's contribution account, and the member's account for other contributions.

"Vested member" or "vested": a member or the status of a member who meets the minimum membership service requirement of the system or plan to which the member belongs.

"Voluntary contribution": an employee contribution to a retirement plan made on an after-tax basis for the purpose of deferring tax on future earnings derived from the contribution. All retirement plans do not allow voluntary contributions.

"Volunteer Firefighters Compensation Act" or "VFCA": the retirement system provided for in Title 19, chapter 17, MCA. The HPORS is a defined benefit retirement plan in which the unpaid, volunteer members of rural fire districts are members.

LIST OF RETIREMENT-RELATED ACRONYMS

DC: Defined Contribution, as in defined contribution retirement plan.

DB: Defined Benefit, as in defined benefit retirement plan.

D of A: (Montana) Department of Administration

CPERS: Committee on Public Employee Retirement Systems.

ERISA: Employee Retirement Income Security Act of 1974, a federal law.

FAC: Final Average Compensation

FAS: Final Average Salary

FASB: Financial Accounting Standards Board

FURS: Firefighters' Unified Retirement System

GASB: Governmental Accounting Standards Board

GWPORS: Game Warden and Peace Officers Retirement System

HAC: Highest average compensation

HAS: Highest average salary

HPORS: Highway Patrol Officers Retirement System

IRA: Individual retirement account; (rarely: Individual retirement arrangement)

IRC: Internal Revenue Code

JRS: Judges Retirement System

MV: Market value

BOI: Montana Board of Investments or Board of Investments

MPORS: Municipal Police Officers Retirement System

MPERA: Montana Public Employees' Retirement Administration

MUS: Montana University System

OASDI: Old Age, Survivors, and Disability Insurance

OBPP: Office of Budget and Program Planning

ORP: Optional Retirement Program or (inaccurately) Optional Retirement Plan

PCR: Plan choice rate

PERA: Public Employees' Retirement Administration or (Montana) Public Employees' Retirement Administration

PERB: Public Employees' Retirement Board

PERS: Public Employees' Retirement System

PD: Personnel Division (within the Department of Administration)

SAIC: State Administration and Veterans' Affairs Interim Committee (1999-2003)

SAVA: State Administration and Veterans' Affairs Interim Committee (2003-present)

SEP: Simplified Employee Pension

SRS: Sheriffs' Retirement System

TRB: Teachers' Retirement Board

TRS: Teachers' Retirement System

UAAL: Unfunded actuarially accrued liability

UAL: Unfunded actuarial liability

VFCA: Volunteer Firefighters Compensation Act